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ABSTRACT

This is a two-component evaluation model designed to improve occupational education programs and improve the process through which they are evaluated. The conceptual component presents a theoretical overview of the evaluation scheme, explains how the procedures of evaluation fit into the planning process, and outlines a framework for implementing the second component. The operational component details the specific methods to be used in performing the evaluation, suggests data collection methodologies and links the information generated to the planning functions. This component is in the form of a user manual and contains criterion models which address nine evaluation criteria areas: (1) curriculum; (2) facilities, equipment and supplies; (3) employer satisfaction; (4) student demand; (5) student performance; (6) student satisfaction; (7) cost-benefit analysis; (8) program articulation; and (9) ancillary services. Each of the criterion modules is made up of four sections: rationale, flowscript of activities, job outline, and worksheet. (Each module is designed to be independent of the rest, so that users may select as few or as many of the criteria as are relevant to their institutional situation.) (LRA)

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A MODEL FOR OCCUPATIONAL EDUCATION PROGRAM IMPROVEMENT THROUGH EVALUATION

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First Edition

A MODEL FOR OCCUPATIONAL
EDUCATION PROGRAM IMPROVEMENT
THROUGH EVALUATION

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TABLE OF CONTENTS

CONCEPTUAL COMPONENT

Introduction....................Page 1
Evaluation Criteria....................Page 1
Management System....................Page 4
Process....................Page 7

OPERATIONAL COMPONENT

Introduction....................Page 11

Program Objectives

Introduction....................Page 12
Goals and Objectives - A Definition....................Page 12
Organizational Goals and Objectives....................Page 13
Program Objectives - Suggestions for Development....................Page 14

Curriculum

Rationale....................Page 17
Responsibility/Action....................Page 18
Job Outline C-1: Consultant, Craft or Curriculum Committees....................Page 19
Job Outline C-2: Consultant Committee Curriculum Review....................Page 23

Facilities, Equipment and Supplies

Rationale....................Page 31
Responsibility/Action....................Page 32
Job Outline FES-1: Consultant Committee Facilities Review....................Page 33
Job Outline FES-2: Consultant Committee Equipment and Supplies Review....................Page 40

Employer Satisfaction

Rationale....................Page 44
Responsibility/Action....................Page 45
Job Outline ES-1: Employer Satisfaction Survey Development....................Page 46

Student Demand

Rationale....................Page 54
Responsibility/Action....................Page 55
Job Outline SD-1: Student Demand Data Options....................Page 56

Student Performance

Rationale....................Page 60
Responsibility/Action....................Page 61
Job Outline SP-1: Follow-Up Survey Development....................Page 63

Student Satisfaction

Rationale....................Page 77
Responsibility/Action....................Page 78
Job Outline SS-1....................Page 79

Cost-Benefit Analysis

Rationale..Page 84
Responsibility/Action....................................Page 85
Job Outline C/B-1: Facilities Expenditure.................Page 86
Job Outline C/B-2: Instructional Expenditure..............Page 88
Job Outline C/B-3: Equipment/Fixture Expenditure..........Page 90
Job Outline C/B-4: Supplies Expenditure...................Page 92
Job Outline C/B-5: Operation and Maintenance Expenditure...Page 94
Job Outline C/B-6: General Support Services Expenditure...Page 96
Job Outline C/B-7: Expenditure Summary....................Page 99
Job Outline C/B-8: Program Benefit........................Page 101

Program Articulation

Rationale..Page 104
Responsibility/Action....................................Page 105
Job Outline A-1: Occupation-Special Education Articulation...Page 106
Job Outline A-2: Secondary/Post-Secondary Articulation...Page 113

Ancillary Services

Rationale..Page 116
Responsibility/Action....................................Page 117
Job Outline AS-1: Student Professional Organizations......Page 118
Job Outline AS-2: Student Services........................Page 122
Job Outline AS-3: Learning Resources......................Page 126

LIST OF WORKSHEETS

C-1.1 Craft Committee By-Laws..Page 21
C-2.1 Suggested Topics for Curriculum Review...........................Page 24
C-2.2 Employability Profile..Page 28
C-2.3 Affective Skill Measurement Worksheet............................Page 29
C-2.4 Curriculum Review Report Form....................................Page 30

FES-1.1 Instructional Space and Facilities Evaluation..................Page 35
FES-1.2 Safety Program Checklist.......................................Page 37
FES-1.3 Instructional Support Materials Evaluation.....................Page 39
FES-2.1 Supplies and Equipment Evaluation..............................Page 41
FES-2.2 Sample Equipment Evaluation Form...............................Page 43

ES-1.1 Draft of New York State Education Department Employer
Satisfaction Survey..Page 47
ES-1.2 Employer Follow-Up Survey of Career Program Students.............Page 49
ES-1.3 Example of Employer Evaluation of Program Graduates..............Page 51

SD-1.1 New York State Education Department Enrollment Data..............Page 57
SD-1.2 Student Demand Information.......................................Page 58
SD-1.3 Suggestions for Reviewing Student Demand.........................Page 59

SP-1.1 New York State Education Department Follow-Up Survey.............Page 64
SP-1.2 Developing Follow-Up Survey Items................................Page 68
SP-1.3 Example Student Follow-Up Survey - Business Education............Page 71

SS-1.1 Student Satisfaction Survey Topics...............................Page 80
SS-1.2 Sample Student Satisfaction Survey...............................Page 82
SS-1.3 Rating Scale Suggestions...Page 83

C/B-1.1 Facilities Expenditure Worksheet...............................Page 87
C/B-2.1 Instructional Personnel Annual Expenditure Worksheet...........Page 89
C/B-3.1 Equipment/Fixture Expenditure Worksheet........................Page 91
C/B-4.1 Supplies-Expenditure Worksheet.................................Page 93
C/B-5.1 Operation and Maintenance Program Expenditure Worksheet.........Page 95
C/B-6.1 General Support Services Expenditure Worksheet.................Page 98
C/B-7.1 Occupational Program Expenditure Summary Worksheet.............Page 100
C/B-8.1 Sample Letter..Page 102
C/B-8.2 Average Weighted Entry Level Wage Formula......................Page 103

A-1.1 Possible Topics for Special Education Articulation...............Page 107
A-1.2 Values Clarification...Page 109
A-1.3 Occupational Education/Special Education Survey..................Page 111
A-2.1 Considerations for Secondary/Post-Secondary Articulation..........Page 114

AS-1.1 Student Professional Organization Review Sheet...................Page 120
AS-1.2 Student Professional Organization Data Sheet.....................Page 121
AS-2.1 Student Services Review Sheet....................................Page 124
AS-3.1 Learning Resources Considerations................................Page 128
AS-3.2 Remedial Program Worksheet.......................................Page 130

CONCEPTUAL COMPONENT

Introduction

The Region XII Executive Committee for Occupational Education Planning felt a need to improve occupational programs and the process through which they were evaluated. The Committee members indicated that due to declining enrollments and limited resources they were forced to make difficult decisions regarding program modifications, additions and terminations on what they consider to be incomplete or inadequate sets of information. They also felt that the enrollment and resource problem would continue to challenge their imagination in the years ahead.

In order to improve their data base from which these decisions could be launched, they requested that a program evaluation model be developed which would not threaten program administrators yet still take into account the wide range of variables that have become indigenous to occupational education but have not been traditionally considered by the program evaluation process. They felt that only through a set of systematic evaluation procedures could the strengths and weaknesses of occupational programs be assessed and the necessary adjustments be made to insure quality courses and programs.

The model that follows is an outgrowth of the Executive Committee's request. It focuses on program improvement through an evaluation process which is tied to program planning. More specifically, the model is presented in two interrelated components - the conceptual and the operational. The conceptual component presents a theoretical overview of the evaluation scheme, explains how the procedures of evaluation fit into the planning process and outlines a framework for implementing the second component. The operational component details the specific methods to be used in performing the evaluation, suggests data collection methodologies and links the information generated to the planning functions. This component is in the form of a user manual and contains several independent modules or packets. Each packet corresponds to a variable or criterion over which a program may be evaluated. A brief description of these packets may be found on page 3.

Since program goals and objectives are essential to both planning and evaluation, a packet is also designed to facilitate their development. Administrators are strongly encouraged throughout the model to involve teachers in the entire process, particularly in setting the program objectives which are centered around the criteria presented in the modules.

This model pulls together and, in some cases, formalizes information that is already available to an institution and offers a system through which this information may be compiled and compared in order to facilitate decision-making. If used as suggested the model will place instructors in the expanded role of classroom managers and promote communication with their supervisors. It will also help clarify the variables which are available and which must be managed for the delivery of a comprehensive occupational education program.

Evaluation Criteria

The basic purpose of evaluation remains unchanged - that is, to provide decision-makers with sufficient information so that they may improve programs and keep them current, relevant and accessible. However, "one of the most pressing problems facing vocational education today is the effective evaluation of its programs with respect to processes and outcomes - (Martin, 1979, P. 143)." The pressure to provide quality programming at a reasonable cost to the community has increased. The general public reviews programs and expenditures more closely than in the past. Special interest groups such as handicapped, disadvantaged, minorities and females seek, and in some cases, demand more and more from occupational programs. Business and industry has also become more vocal with respect to the type and quality of potential employees being trained by occupational programs. CETA is an alternative to which potential employers may turn if they are not satisfied with the existing vocational education delivery system. In fact, "Congress is setting up two job training worlds, and it is not beyond the realm of possibility that if the newer of these worlds succeeds - the world involving the Labor Department - and the vocational education world does not move forward that vocational education will become a thing of the past (P. 148)."

In a series of personal interviews selected occupational education administrators in Erie, Niagara and Orleans Counties agreed that formal evaluation seems to be at a minimum due to constraints of time, staffing and finance. While they desire a more comprehensive program evaluation, they indicated that there is a large gap between what is and what could or should be. A collective summary of these interviews reveals the following:

- there are very few institutions that have any type of formal evaluation program
- there exists a reluctance on the part of staff and administrators to participate in any form of evaluation
- at the post-secondary level required evaluation by accrediting and professional organizations is performed
- institutions feel more comfortable with internal rather than external evaluation
- most administrators would be willing to utilize a comprehensive model provided it was concise and direct
- there is a need to place more emphasis on employability rather than employment and to integrate the assessment of the affective domain into the overall evaluation process
- the evaluation process should be a part of the total program delivery process rather than a disjointed or fragmented activity.

Region XII is not alone in its attempt to expand the process through which its occupational programs are evaluated and improved. Occupational education directors from across New York State identified program evaluation as a major area of concern and devoted their January, 1978 statewide conference to this topic. At the federal level one need only review recent legislation (PL94-142; The Education for all Handicapped Children Act of 1975; PL94-482 (Title II): The Vocational Education Amendments of 1976 and PL93-112; Section 504: The Rehabilitation Act of 1973) to become aware of the national concern and commitment to program improvement through evaluation. The desire for better procedures to evaluate occupational programs has been registered; the task now is to translate these concerns or desires into viable programs that are meaningful to providers at the local level.

Traditionally occupational education programs have been evaluated in light of two factors - student program demand and post-program placement. While these traditional factors or criteria begin to address program access and program product, they do not provide an adequate appraisal of program quality. The literature was searched and local administrators were interviewed in order to identify additional criteria or variables over which occupational programs could be reviewed. The nine criteria briefly explained below are a synthesis of that research effort and will be used by this model to evaluate programs:

1. Curriculum - this criterion focuses on determining if the curriculum is current and meeting the needs of business and industry, on identifying new and emerging occupations (skills which need to be added to the present curriculum), on integrating affective, job seeking and career planning skills into the curriculum and in assessing the format of curriculum as it relates to the competency based process promoted by ISSOE. As with facilities, equipment and supplies consultant committees will provide input to this evaluation criterion.

2. Facilities, Equipment and Supplies - this criterion reviews facilities, equipment and supplies from a program rather than an institutional point of view. The information generated relates to the degree of relevance and acceptability that facilities, equipment and supplies have for a specific occupational program. While students, teachers, supervisors, community members and individuals employed in a related occupation may respond to this criterion the major input will come from consultant and advisory committees.

3. Student Demand - this criterion basically deals with the number of students enrolled in programs, percent of capacity, dropout rate, attrition rate, etc. It has traditionally received considerable attention.

4. Student Performance - this criterion deals with the number and percent of students placed and/or continuing their education, turnover rate and number and percent of unemployed. This is also a traditional evaluation criterion and is therefore well developed in most institutions.

5. Employer Satisfaction - this criterion is modeled after the forms being drafted at the Federal and State level and addresses questions such as: Are employers aware of the skills (technical and affective) that the students possess? Can students adequately perform these skills? Are there additional skills needed for entry level employment?

6. Student Satisfaction - this criterion focuses on the students' reaction to their program of instruction and is not directed toward an evaluation of their instructor. Typical questions will include items

such as the following: If they had it to do over again would they take this program? Were the topics taught what they expected? Were the skills learned relevant to their job aspirations? Were the equipment, supplies and space adequate? Did they feel that their individual learning needs were met? Do they feel adequately trained to obtain a job?

7. Cost-Benefit Analysis - this criterion identifies the expenditures per program for each of the following variables: facilities, instruction, equipment, supplies, operation and maintenance, and general support services. The benefit side of the equation is limited to the identification of potential entry level wages per program since a comprehensive benefit analysis is beyond the scope of this model.

8. Articulation - there are two major articulation categories addressed by this model: occupational education/special education and post-secondary/secondary. This criterion takes the form of identifying topics over which articulation objectives can be written. Occupational education/special education focuses on the identification of attitudes toward special education students, values clarification, levels of awareness, identification of readiness skills, adaption of curriculum, equipment and space, involvement in Individual Educational Programs, etc. Considerations for post-secondary/secondary articulation include defining roles, sharing expensive equipment and excessive facilities, establishing and promoting relationships among teachers, establishing specific curricular charges, establishing and refining advanced standing/credit procedures, and cooperating in other areas such as recruitment, placement and follow-up.

9. Ancillary Services - this criterion focuses on how well individual occupational programs use ancillary services to promote learning rather than on an evaluation of the ancillary services per se. The services addressed by this module include: student professional organizations, student services (counseling, placement, work study and job seeking skills), remedial programs and related resource materials.

Management System

Studies indicate that plans or strategies which are made up of goals and objectives are much more likely to be implemented if those involved in the implementation process are also involved in the goal and objective setting process. Because evaluation relies on clearly defined standards or objectives against which results can be measured, it is logical that a model to improve occupational education programs through evaluation include program instructors from the beginning, since it is they who are responsible for carrying out the objectives. More specifically, this model seeks to involve instructors in the development of program objectives as well as relies on them to provide input pertinent to the measurement of those objectives. It is this expanded involvement on the part of teachers together with a more complete set of evaluation criteria that makes this model more responsive to the needs of individual institutions.

Involving teachers in the objective setting process and reviewing the results at the end of each school year, forms the basis for a management by objectives (MBO) situation. In such a system teachers are viewed as educational managers assigned with the task of utilizing the various tools at their disposal (see nine criteria) to develop a program completer who satisfies the goals and objectives of the institution and the individual program. As teachers accept their role as managers they will, as George Ordione indicates, actively direct, control and manipulate the educational environment in a way that involves an appreciable amount of risk in order to realize truly worthwhile results. Risk, Ordione continues, is necessary if progress is to be made. He claims that without risk managers are controlled rather than in control. The resultant personal payoffs are the fulfillment of an individual's need to contribute and develop. However he warns that teachers as managers will require the same things that are typically required of any supervisor (Ordione, 1965, P. 39). That is, they will desire (Savage, 1978, P. 22):

1. Mutual agreement on what results are expected.
2. The opportunity to exercise personal and professional judgment.
3. Feedback on progress.
4. Direction and support when needed.
5. Reward and compensation in equal measure of his/her contribution to the organization.

Since objective setting is the key to planning, evaluation and MBO processes, an individual packet has been devoted to this activity (see page 12). Basically the process as designed for this model will require supervisors to work with individual instructors in order to develop a set of objectives for each program. The nine evaluation criteria can be used as a springboard for the objective setting process. Each criterion packet contains a list of sample program objectives which will facilitate and give direction to the objective setting. See the program objectives packet for more complete information on this topic.

Evaluating individual programs over a series of criteria and involving instructors in the entire process is a departure from the way most occupational education programs are currently being reviewed. However, administrators, teachers and, most importantly, students stand to benefit from such an approach. Below are listed some of the advantages that these groups will accrue by using this process:

1.0 Administrators
    1.1 The process pulls together a considerable amount of information on each program (most of which is already being collected) and gives a more complete picture of each program to the decision-makers.
    1.2 The model output can be used as an accountability document for the board, chief school officer, advisory council, the community and the State Education Department.
    1.3 A comparative analysis of the results will "red flag" problem areas in specific programs.

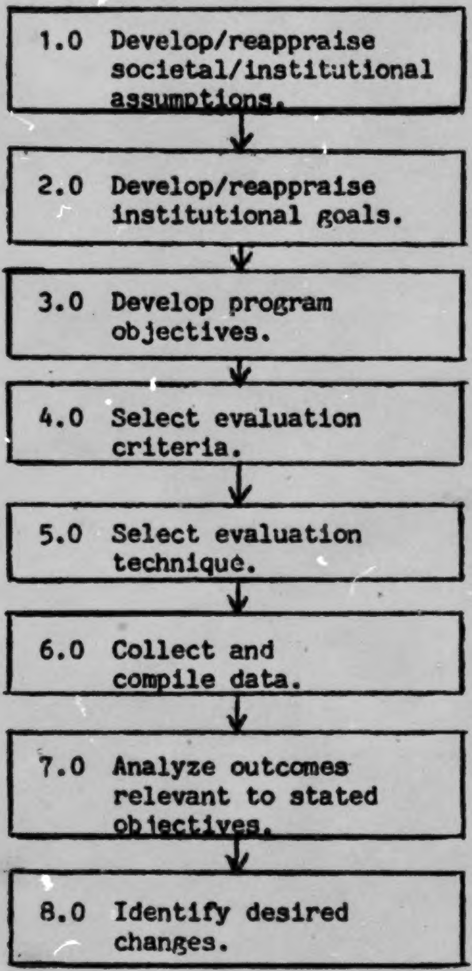
1.4 The process will help instructors understand the complexities and variables involved in the delivery of occupational education. That is, they should see that teaching is more than just telling and showing a student "how to change spark plugs." It should help them see that they are classroom managers who facilitate, present and expose learners to situations that will satisfy their desire to improve.
1.5 The model will provide concrete information on programs that are having problems and help provide strategies to help them over the rough spots.
1.6 The model should help administrators focus on program and institutional goals and objectives.
1.7 Once established the evaluation process will not take a disproportionate amount of additional time.
1.8 The model completes the planning cycle.

2.0 Teachers
2.1 The model provides teachers with the opportunity to have formal input to the decision-making process.
2.2 The evaluation process gives teachers an opportunity to discuss the direction of their program and formally qualify why things have gone well or poorly.
2.3 The model output will provide teachers with an opportunity to show supervisors, parents, boards, etc. the positive things that are taking place in their program.
2.4 The model output will give formal backup and rationale for program change (space, equipment, curriculum).
2.5 The process offers teachers the opportunity to provide feedback/criticism on ancillary services.
2.6 The model will not take a disproportionate amount of a teacher's time.
2.7 The model will help teachers focus on program and institutional goals and objectives.
2.8 The model will help teachers understand the variables and complexities involved in the delivery of occupational education.
2.9 The model will help teachers improve their programs.

3.0 Student
3.1 The model will help keep the program current.
3.2 The model should promote flexibility so that students with special needs can learn to their capacity.
3.3 The model should help make best use of limited resources.
3.4 The model will give students input to the evaluation of their program.
3.5 The process should give students a better managed and coordinated program of instruction.

Process

An evaluation process is only one facet of a complete occupational education delivery system. The role that evaluation plays at each institution will vary depending on the preparedness for and expertise in evaluation, the commitment of the personnel involved and the specific evaluation strategies utilized. The schematic that follows conceptualizes for the user how this evaluation program can be integrated into the total planning process.


1.0 Develop/reappraise societal/institutional assumptions.
2.0 Develop/reappraise institutional goals.
3.0 Develop program objectives.
4.0 Select evaluation criteria.
5.0 Select evaluation technique.
6.0 Collect and compile data.
7.0 Analyze outcomes relevant to stated objectives.
8.0 Identify desired changes.

The flow of activities contained in this schematic will clarify for the user the steps included in the evaluation process and how that process is included in the total plan of an institution. Each of the individual modules or packets, contained in the second section of this booklet, will explain precisely how the user can perform the evaluation for the criteria selected.

The activities identified in the schematic are briefly expanded below:

1.0 Develop/reappraise societal/institutional assumptions. Before any comprehensive planning can begin, it is important for an institution to identify the assumptions upon which subsequent goals and objectives will be based. This is particularly true for those institutions involved in addressing the occupational education needs of the community. The current energy situation may dictate revolutionary changes on the world of work as we know it today. This can impact not only on the types and direction of program offerings but also on the systems used to deliver the programs such as the transportation of students. While such changes may not be imminent, it would behoove program planners to identify the future or futures that they feel their institution will be striving toward during the period for which they are setting the plan. For example, institutions may want to consider some of the following assumptions:

- that our educational system (program and finance) will remain relatively unchanged
- that the future of occupational education is neither entirely unforseeable nor entirely inevitable
- that the industrial society will continue as the predominant paradigm
- that alternate futures for occupational education exist and that we can exercise some influence in determining the future of occupational education
- that program decision-makers can make more intelligent decisions by increasing their level of awareness and the amount of pertinent information available to them

2.0 Develop/reappraise institutional goals. Once the assumptions are in place, an institution should focus on its mission statement and overall goals from which its basic purpose and direction are derived. Included in this section are the goals and objectives specific to occupational education as a program component to the institution. That is, goals are to be developed for the overall delivery of occupational education as opposed to special education or computer services. Of course these program component goals should be based on the general institutional mission.

Given the increased concern over and legislation regarding planning, most institutions should have on file a set of these goals and objectives and are referred to review their respective 793, 848, 399, five year master plan or in-house planning documents. Of course, the assumption is that the goals and objectives contained in these plans were written to truly identify the purpose and direction of the institution rather than just to satisfy a legislative mandate. If the latter of these two alternatives is the situation, the institution is strongly urged to develop a set of meaningful goals and objectives.

3.0 Develop program objectives.

Using the institutional and occupational education goals as a focal point the individual program objectives may now be developed. In this context program is defined as a course or courses of instruction which collectively prepare a student for an occupation in a specific discipline; e.g. auto mechanics, cosmetology or office practice. At the secondary level most programs will be identified as courses of instruction since in most secondary institutions the occupational course consumes half of a student's day. However, at the post-secondary level a student may engage in several courses or modules in order to complete a specific program.

This program objective setting activity is crucial to this evaluation process and as such an individual packet has been designed to facilitate it for the user (see page 12).

4.0 Select evaluation criteria.

There are several variables or criteria over which an occupational program may be evaluated. Student demand and student placement are the two most popular criteria and in many cases the only criteria over which programs are assessed. This model identifies seven more criteria (see page 3 for a synopsis) but in no way claims to offer an exhaustive list.

As users will notice upon review of the program objectives setting packet, selecting evaluation criteria is integrated into the objective development process. Users may select as few or as many of the criteria as they feel necessary to adequately assess their programs. Once a certain level of familiarity is achieved with this evaluation process, selecting the criteria will not be a complicated activity.

5.0 Select evaluation techniques.

In the criteria packets there are several techniques or methods through which each of the criterion can be measured. The user must select the technique or techniques which are most suitable to measure the identified criteria for their institution. As with the list of criteria the types of techniques set forth in the packets are thought to be among the most "useable," but in no way are thought to be an exclusive set of measurement strategies. If the users have measurement procedures already in place or are aware of methods which they feel are more suitable and reliable for their institution, they are encouraged to employ those methodologies.

6.0 Collect and compile data.

The techniques and forms selected to review the criteria must be administered and the data generated compiled. The modules suggest strategies for this activity and attempt where possible to use data collection systems that are already in place. Once an institution has its methodologies to collect data in place, the actual collection should not take an inordinate amount of time.

7.0 Analyze outcomes relevant to stated objectives.
The measurements made and the data collected should then be reviewed in relation to the program objectives identified in 3.0. It is through the standards identified there that the data takes on meaning and relevance.

8.0 Identify desired changes.
The entire purpose of launching any type of evaluative process is to improve existing conditions - in this case the delivery of occupational programming. Once the measurements have been related to the benchmark objectives, the decision-makers are encouraged to identify the strengths and weaknesses of the programs, determine aspects of programs that should be modified, and establish strategies to make those modifications. These proposed changes should form the basis for the following year's goals and objectives.

OPERATIONAL COMPONENT

Introduction

This section provides the user with specific instructions, rationales, procedures and forms necessary to carry out the program improvement model. It contains a program objective packet and modules which address each of the nine evaluation criteria.

The criterion modules are made up of the following sections:

1. Rationale (yellow) - This section justifies why the criterion was chosen and includes a set of sample program objectives tailored to meet the elements of the criterion.

2. Flowscript of Activities - This section identifies the specific activities necessary to work through the module and the individuals responsible to perform those activities.

3. Job Outline - This section is an amplification of a procedure or activity listed in the flowscript. It usually deals with survey development.

4. Worksheet (blue) - This section presents sample survey forms and/or laundry lists of ideas that may be useful for surveys or program objectives.

Each module is designed to be independent of the rest, so that users may select as few or as many of the criteria that are relevant to their institutional situation. The modules are also flexible enough to allow users to choose only a few elements of any one criterion.

It is the intent of this model that potential users will be able to implement it without outside consultation. However, if questions arise or roadblocks develop, the Regional Planner for Occupational Education may be called upon for assistance. In Erie, Niagara and Orleans that person is Gerald Glose, 4071 Hardt Road, Eden, New York 14057 - (716) 992-3413.

Program Objectives Packet

Introduction

Three features of this model combine to make it a meaningful and practical approach to program improvement through evaluation. First, users have the option of choosing from among nine different evaluation criteria to review their programs. While they are encouraged to use all of the criteria, they may select as few or as many as is realistic to their particular situation since each criterion can be implemented independently of the others. Secondly, the model takes advantage of a user's manual format through a series of individual modules or packets which contain instructions, program objectives and sample worksheets and surveys. Finally, the model relies upon extensive involvement from instructors in the development of individual program objectives and in the measurement of certain data types. Taken collectively all the features of this model are very useful in tieing an entire occupational education program together. However, it is this last feature, the teacher involvement, that forms the foundation upon which the effectiveness of the entire evaluation program is based. Because teacher involvement and program objective development are so important, this packet has been devoted to assist users through that phase of the evaluation process.

Goals and Objectives - A Definition

There are a variety of definitions for the terms that will be used throughout the rest of this model. In order to establish a common ground the following definitions have been chosen for use by this model.

> A goal is a statement of broad direction or intent capable of being measured and capable of being obtained, however, not necessarily concerned with achievement during a specific period of time. Goal statements generally identify the purpose of an organization or program and are used to describe why various activities take place.
>
> Objectives are concise statements of organizational results to be achieved over a specific operating period which moves the organization nearer (though perhaps never to) the realization of its goals. Objectives must be realistic and if all goes well achievable (Savage, 1978, P. 37). An objective should satisfy the following criteria (PP. 38-40):
>
> 1. They should describe a result, not an activity. Because activities absorb our day-to-day attention and are more easily specified than results, it is seductively easy to fall into what is known as the activity trap. Statements of results communicate more fully than statements of activity; however, they are more difficult to define. In writing objectives you might ask yourself whether the statement as written in and of itself really makes a difference and why. The answer to this why question will normally lead you from an activity statement to the result you are after.

A well stated objective helps an organization to keep its focus on what is truly important - the results, both quantitative and qualitative, being achieved.

2. *They should be specific enough to be able to discern accomplishments.* Frequently we hear that objectives must be quantitative (or measurable) but the term often raises the spector of a "numbers game." The criterion of specificity can certainly be satisfied if you are able to state an objective numerically. This is often difficult or impossible. In such instances the precise use of language can still produce a well stated objective.

3. *They should specify a time frame or target date.* Since the program objectives utilized by this model will be revised annually, the time frame will usually be a twelve month period. However, some objectives may specifically address shorter or longer time periods.

4. *They should be challenging but achievable.* It is easy to state an objective that is challenging and also to state one that is achievable. Realizing the combination is an art. Experience will help. This is an area in which supervisors can lend their expertise.

5. *They should be consistent with organizational goals and other objectives.* Consistency with organizational goals will be made easier if those goals and objectives are clearly and comprehensively stated.

To avoid ambiguity this model breaks objectives down into three separate categories. The first category refers to *organizational* or *institutional objectives*. Included in this category are objectives which apply to the entire institution as well as to the individual program components of the institution such as occupational education, special education, continuing education, etc. Organizational and institutional objectives are lumped together because they are interrelated and both provide direction and focus in the development of program objectives, the second category of objectives. *Program objectives* refer to the specific occupational education programs within an institution, for example, auto mechanics, cosmetology, dental assisting, building trades, and the like. It is at this level that the evaluation model places heavy emphasis and encourages instructors to be integrally involved. *Instructional objectives* are the third type and are typified by statements that indicate what the learners will be like when they successfully complete a learning experience (Mager, 1962, P. 3). Curricula are often defined through instructional objectives. The ISSOE materials offer exhaustive examples of this type of objective over several curricula.

Organizational Goals and Objectives

Before program objectives can be developed, a concise, comprehensive set of organizational or institutional goals and objectives must be in place.

With the increased emphasis being directed toward planning, many institutions have a well thought-out set of such goals and objectives. Documents that identify this institutional direction include the 793 plan (BOCES), the 848 plan (component districts), the 399 plan (city districts), and the five-year master plan (two-year post-secondary institutions). Unfortunately these plans are not always up-to-date and in many cases are not taken seriously. If such goals and objectives have been conscientiously developed and are relied upon by an institution for its purpose and direction, then users can proceed to develop their program objectives. If, on the other hand, there is little or no confidence in the institutional objectives, then a meaningful set must be put together.

Because the development of these institutional objectives is thought to be beyond the scope of this model, the user is referred to the following publications for assistance in this activity:

Western New York Planning, Programming and Budgeting System Chester, Kaiser, et al., An Operational Model for the Application of PPBS to Local School Districts, (Post Pilot Test Version), Buffalo: Erie County BOCES No. 1, 1979, (WNY PPBS Model Volume 1).

Western New York Planning, Programming, Budgeting, Self Instructional Lessons and Performance Guides, John Murphy, et al. Buffalo: Erie County BOCES No. 1, 1972, (WNY PPBS Model Volume 2).

Workshop Packet for Educational Goals and Objectives: A Model for Community and Professional Development. Phi Delta Kappa, Inc., Commission of Educational Planning, Box 789, 8th and Union Streets, Bloomington, Indiana 47401, 1972.

Determining Instructional Purposes, Unit 1: Setting Goals. Farwest Laboratory for Educational Research and Development, 1855 Folsom Street, San Francisco, California 94103, 1972.

Program Objectives - Suggestions for Development

As mentioned earlier the program objectives do form a foundation upon which the rest of this evaluation model is built. It would be difficult for teachers to be committed to the objectives unless they are involved in their creation. This model, therefore, strongly recommends that users integrate the following suggestions in developing their program objectives.

1. Make sure the institutional goals and objectives are in place. This item has been dealt with in the previous section.
2. Based on the institutional goals and objectives and the needs and resources of the particular institution, select the number and type of criteria that will be used to review or evaluate the occupational programs. Users should become familiar with each of the nine criteria packets before they select those criteria which they will use to evaluate their programs.
3. Have teachers create the objectives which will be used to review their programs. Before teachers engage in the actual formulation of the objectives they should receive a thorough explanation of the evaluation model so that they understand its purpose

and advantages and see that its aim is to improve programming rather than criticize their teaching. They should also receive a copy and explanation of the institutional goals and objectives so that the program objectives that they develop reflect this organizational direction. Next, the teachers should be informed of the specific criteria that have been selected as well as a rationale for their selection. The users may want to include instructors on an ad hoc committee to help perform this selection. The general techniques and criteria necessary to write an objective should also be reviewed with the teachers and they should be given an opportunity to practice these objective writing techniques. All too often educators are familiar with objective development terminology, but are woefully lacking in the actual art of writing a good program objective. The criteria for writing objectives have been listed earlier in this packet.

Given this background information, instructors should now refer to the sample objectives included in each of the criteria packets and proceed to create, adapt or adopt objectives that will be specific to their program for each of the criteria selected for the review process. Using the sample objectives as content guidelines and remembering to relate each objective to their individual program should provide instructors with a good springboard from which meaningful and practical objectives can be written.

4. A supervisor will review the program objectives with the instructor. This is an important part of the objective development process and must be handled delicately yet effectively. Objectives must be challenging to promote growth and yet not overwhelming which could promote frustration. In addition, the objectives must be clear and unambiguous to both the teacher and the supervisor. To this end, objectives should be put into writing, for oral agreements often can become confused, modified or misinterpreted. As a gauge in determining the level of input that supervisors should have in this participative objective setting process, they should consider their management style (the amount of participation that comes most naturally and their degree of flexibility). They should also be aware of the needs and abilities of the teacher that they are dealing with. Some teachers will respond to a higher degree of structure while others will resist a structured approach and be quite capable of formulating a meaningful set of objectives on their own.

   In reviewing the teachers' objectives a supervisor should ask the following questions of each objective presented (Savage, 1978, P. 43):

   1. Is it practical?
   2. Can the teacher achieve it during the indicated time?

    3. Can more be achieved during the indicated time?
    4. Are all aspects of this objective clearly, unambiguously and precisely stated?
    5. Is the objective compatible with the institutional objectives and does it support them?
    6. Is it within the teachers realm of responsibility?
    7. Does the teacher have the authority to achieve the objective?
    8. How much outside help is needed to achieve the objective?

5. Once the program objectives have been identified and agreed upon, the types of data which must be collected to measure the objectives and the level to which teachers are involved in the data collection must be discussed and formulated. Again, users are referred to the criteria packets for data collection suggestions. Of course the types of data will depend upon the specific program objectives.

6. At the end of the year measurement data should be compared to the program objectives. Strengths and weaknesses of the program should be identified and strategies to improve weaknesses should be discussed. This end-of-the-year review will provide the basis for the following year's program objectives.

Working through a system such as this will require institutions to focus on results, rather than activities. It also promotes face to face negotiation between supervisors and teachers in an effort to produce mutual understanding and agreement. And finally, it facilitates and encourages cooperation among peers.

While the suggestions presented in this package are not all inclusive, they should provide users with several ideas useful to their program objective development.

Curriculum

Rationale:

Curriculum is a very important parameter in occupational programming. Because of the heavy emphasis placed on finding employment for graduates in occupations related to their training, it is essential that the curriculum adequately reflect those skills which are necessary for such employment. Course content should be based on an analysis of occupational requirements and a process should be in place to maintain that congruence between the training provided and current occupational practices. The New York State Education Department recognizes this need for relevant training and as a result has committed considerable resources to improve the occupational education curriculum through the multiyear, statewide ISSOE/V-TECS project.

Input from consultant, craft or curriculum committees is the principle means used by this module to obtain updated information on program content. The instruments used to solicit this information could also be administered to other groups such as employers, teachers, graduates, and other individuals employed in the occupation.

There are several skills that occupational education students should possess upon graduation. A comprehensive curriculum should not only address technical and affective (attitude, reliability, ability to deal with others, etc.) skills but should also treat job seeking skills, safety habits, career planning and be able to accommodate students with divergent learning rates. The level and intensity with which each of these skills is treated by the curriculum will be determined by the instructor and his/her supervisor. The program objectives that relate to curriculum can be used to focus on the specific direction or areas of emphasis that an individual program curriculum will take. The user is invited to review the following sample objectives in order to more fully understand the variety of topics that can be directed toward a program curriculum:

- That all elements of the curriculum are directly related to the requirements of the occupation(s).

- That affective skills are integrated throughout the curriculum.

- That consultant, craft or curriculum committees review the course content this year.

- That the curriculum has a mechanism to accommodate students with different learning rates.

- That each unit of instruction will be broken down into criterion referenced, performance objectives.

- That there will be units of instruction on job seeking skills and career planning.

SUBJECT: Curriculum

RESPONSIBILITY	ACTION
Program administrator and instructor.	1.0 Identify/develop the program objectives that relate to curriculum. 1.1 See program objectives packet. 1.2 Review Worksheet C-2.1. 2.0 Determine the types of information to be collected. 2.1 Review the program objectives identified in 1.0, and list all of the data types that will be necessary to make the analysis. 3.0 Orientate consultant committees to curriculum review process. 3.1 Ideas that are useful in organizing consultant committees are presented in Job Outline C-1. 3.2 Ideas that are useful in preparing consultant committees for curriculum evaluation are presented in Job Outline C-2.
Consultant committees.	4.0 Perform the curriculum review. 4.1 Topics to be addressed and a suggested process are given in C-2.1.
Program administrator, instructors and consultant committees.	5.0 Compare the results with the identified objectives. 5.1 Refer to objectives developed in 1.0 6.0 Prepare and submit a report on curriculum review. 6.1 Success with program objectives. 6.2 Obstacles/roadblocks to achieving objectives. 6.3 Recommendations for future objectives. 6.4 Improvements in measurement strategies and data collection instruments and processes.

Purpose:

In the evaluation of curriculum, facilities, equipment and supplies input from those people employed in related occupations is important to the maintenance of relevant occupational programming. To that end the State Education Department has requested that each occupational education institution set up a structure of advisory input from the community. More specifically, Local Advisory Councils for Occupational Education provide input on matters that relate to the entire institution; Consultant Committees for Occupations, on the other hand, provide input to individual occupational programs and in so doing provide a data base valuable to the advisory councils for their decision-making. For more information on either of these groups, the following publications are available through Florence Sutler of the Division of Occupational Education Planning, Research and Evaluation, Room 1623, State Education Department, 99 Washington Avenue, Albany, New York 12230:

A Handbook for Members of Advisory Councils for Occupational Education

A Handbook for Members of Consultant Committees for Occupations

There are several formats or structures that an institution can use in actualizing its consultant committees. The remainder of this section will be devoted to identifying some of the variables to be included in consultant committee activity.

1. Committee membership should range from five to ten members which represent the occupation under consideration and include males and females, labor and management, students or employed ex-students.

2. The committee membership should be formally appointed by the Board of Education or Board of Trustees.

3. Program instructors and administrators should serve in an ex officio capacity.

4. In order to assist these committees in their function, a set of bylaws should be established. Such bylaws should address the specific function of the group, membership, tenure, reporting systems and deadlines, meeting framework and frequency and the method of appointment. C-1.1 provides a sample set of consultant committee bylaws.

5. Consultant committees are advisory in nature and should not address all parameters associated with a course or program but rather focus on topics relevant to their expertise.

6. The charge or function of each consultant committee should be clearly defined. Examples of consultant committee functions include the following:

- evaluation of program content which includes skills needed, the level of performance, the sequence of units of instruction, the occupations served (see Job Outline C-2).
- evaluation of facilities, equipment and supplies as they relate to the world of work (see Facilities, Equipment and Supplies Packet).
- assistance with placement.
- suggestions for inservice for teachers.
- recommendations for work experience situations.
- prerequisites or desired attitudes or skills of prospective students.

7. Committee findings should be reported in writing to the local occupational education advisory council, the occupational education supervisor and the instructor.
8. Each committee should have a lay chairperson who is responsible for committee reports, meeting agendas and minutes and meeting procedures.
9. Each committee should have access to the institutional and program objectives for the area which they serve.
10. Each committee should receive a report which summarizes the significant findings made through other evaluation activities such as placement, student evaluation of course content, employer satisfaction, etc.

BOARD OF COOPERATIVE EDUCATIONAL SERVICES Worksheet C-1.1
SECOND SUPERVISORY DISTRICT
ERIE-CATTARAUGUS COUNTIES

CRAFT COMMITTEES
BY-LAWS

Introduction

As technology changes in a working environment, the skill requirements of workers also change. Accordingly, there is a need for BOCES to develop new curriculum and maintain properly equipped facilities to keep pace with the occupational changes. The BOCES should have access to occupational information in order to identify job potential, develop viable job descriptions, skill requirements, educational materials, equipment lists, and facility layouts. The basic source of this knowledge is the employer and employee in the occupation. Providing pertinent, up-to-date information to the occupational educators is one of the primary functions of Craft Committees. These committees assist in planning, development of new programs, and the evaluation and revision of existing programs.

Functions

The Craft Committees, as a result of their meetings, will provide written recommendations regarding:

A. Budgeting for new equipment review.
B. Course evaluation--assessment of curriculum in line with employer needs.
C. Program evaluation--evaluation of the programs in line with program objectives from the Cost Quality Effectiveness report criteria.
D. Course revisions--changes in existing courses to correspond more closely with employer needs.

Composition

Craft Committees will be formed for each Area Vocational Center. Craft Committee members will be appointed by the BOCES Board on the recommendation of the Executive Officer with the advice of the Occupational Advisory Council. The responsibility for the functioning of Craft Committees will rest with the Vocational Center Building Principal.

The Occupational Education Advisory Council will be kept informed of the formation and operation of the Craft Committees. The elected chairman of each of the Craft Committees will be responsible to communicate his committee's deliberations and/or recommendations directly to the Occupational Education Advisory Council. The Craft Committees will consist of at least five members, both male and female, respresenting both labor and management. The committees will, where possible, include a student or recent graduate employed in the occupation. A lay member of the Craft Committee will be selected as Chairperson by the members of the Committee. Teachers and/or other BOCES administrators will serve as ex officio members; they will not be appointed as chairpersons.

Adopted 10/24/77
Action #76

Worksheet C-1.1
(Page 2)

New courses and teachers will be assigned to either an existing committee and/or a separate Craft Committee will be established. This decision will be based upon consideration by the Assistant Superintendent of Instruction with the advice of the Occupational Education Advisory Council.

Tenure of Members

Membership in a Craft Committee will be for a maximum of three years with one-third of the membership appointed each year. Teachers may be recommended by the Area Vocational Center Building Principals.

Meetings and Reports

Recommendations developed by the Craft Committees will be presented in writing by the chairperson of the specific committee to the Occupational Education Advisory Council. The Council in turn, when appropriate, will present such recommendations to the Executive Officer and the BOCES Board for action. In some instances, recommendations of the Craft Committees can be considered directly by the Assistant Superintendent for Instruction, Vocational Center Building Principal and/or teacher for implementation. This is particularly true when such a recommendation can be implemented without a change of policy or involves no financial question.

An agenda developed by the chairperson of the Craft Committee, in consultation with the teacher and/or other BOCES administrator will be given to the membership in advance of the meeting to permit them to prepare for the meeting. There will be at least four meetings of the Craft Committees each year. Minutes should be maintained of all meetings and disseminated to the total Craft Committee membership and a copy sent to the Occupational Education Advisory Council chairperson. A complete file of the minutes should be maintained in the office of the Assistant Superintendent for Instruction and by the Craft Committee chairperson. Recommendations will be forwarded by the chairperson to the entire Occupational Education Advisory Council.

The scheduling of the Craft Committee meetings is important. Their evaluations and recommendations will be acted upon by the Occupational Education Advisory Council and forwarded to the Executive Officer and BOCES Board of Education. The Craft Committee meetings should follow the meeting calendar as closely as possible.

Calendar:

April - Course Evaluation
June - Program Evaluation
October - Course Revision
December - Equipment Budget Review

Three of the six Craft Committee members (preferably the chairpeople) from each Area Vocational Center will be invited to become members of the Advisory Council to provide each Craft Committee discipline representation on the Occupational Education Advisory Council.

Craft Committees will meet in joint session with the Occupational Education Advisory Council at one meeting per year.

Consultant Committee Curriculum Review

Job Outline C-2

Purpose:

This section is designed to give consultant committees a structure for evaluating the course content of individual programs. It assumes that the advisory/consultant committee apparatus is in place at your institution. (Suggestions for consultant committee refinement are provided in Section C-1). The worksheets presented are designed for consultant committees but may also be used to gather feedback from instructors, students, other employers or the community.

The following is a summary of the worksheets included in this section:

C-2.1 Suggested Topics for Curriculum Review - This worksheet asks a series of questions over eight topics that could be used to review a curriculum. Suggestions for methods to answer the questions are also given.

C-2.2 Employability Profile - This worksheet offers a format for an employability profile student evaluation form.

C-2.3 Affective Skills Measurement Worksheet - This worksheet can be used to help identify the degree to which affective skills are integrated into the curriculum and treated in the classroom.

C-2.4 Curriculum Review Report Form - This worksheet offers a format that may be used to report curriculum findings.

The following are instructions for this job outline.

1.0 Make each consultant committee aware of its charges as they relate to curriculum review.
    1.1 See consultant committee bylaws.
2.0 Present the institutional and program objectives that relate to curriculum to each consultant committee.
3.0 Summarize for the consultant committee the significant findings found in other evaluative criteria reports; e.g. employer satisfaction, student placement, cost/benefit, etc.
4.0 Based on the consultant committee charges (1.0) and the institutional and program objectives, determine the sections/topics of the program curriculum that will be reviewed.
    4.1 C-2.1 contains an overview of topics that may be considered.
5.0 Each consultant committee will review their respective program curriculum for each of the topics selected in 4.0.
6.0 Each consultant committee will report their findings in writing to the institutional advisory council, the program administrator and program instructor.
    6.1 A sample reporting format is provided in C-2.4.

Introduction

This worksheet includes a series of topics over which curriculum may be reviewed and some suggestions for performing that review. Users are encouraged to look over the entire worksheet before they select the type of and process for review. Users are also reminded to refer to the program objectives as a basis for topic selection.

Once the users have selected the topics they wish to review and the process for that review, they should implement that process and report their findings. A suggested format for the report is given in C-2.4.

1.0 Relevance of Technical Skills to Labor Market

1.1 Do the types of skills being taught accurately reflect the skills required in the real world of work?

1.2 Does the level of performance of each skill being taught accurately reflect the degree of proficiency that a student needs for an entry level position?

1.3 Is the sequence in which the topics are taught logical and efficient?

1.4 Do students obtain sufficient proficiency in the use of tools and equipment?

1.5 Is the emphasis given to manipulative skills and technical theory consistent with the needs of the labor market?

1.6 Are health and safety practices sufficient and meaningful (also see FES-1.3)?

Suggested review process: In order to identify the various skills being taught and the level of performance expected it is suggested that the committee obtain a copy of a detailed course outline, the employability profile, lesson plans and/or the ISSOE-V/TECS program curriculum. Using these background materials together with comments from the program instructor and perhaps even a classroom visitation the questions presented above can be answered.

2.0 Integration of Affective Skills

2.1 What affective skills should be, and are being addressed, by the program curriculum. Examples of such skills include desirable work attitudes, pride in workmanship, reliability, work area neatness, occupationally acceptable personal grooming and dress, knowledge of personal and business ethics, awareness of appropriate customer relations, necessary communication skills, reaction to authority, ability to work with others, leadership, motivation, initiative, responsibility and self esteem.

2.2 To what degree are the affective skills reinforced by the curriculum.

2.3 Does the instructor have a formal process that is helpful in evaluating the affective skills of students.

2.4 Are the affective skills included in the student evaluation report (see the sample employability profile C-2.2).

Suggested review process: Employers will consistently rate attitude and reliability as the most important skills that a prospective employee can possess. Therefore it is essential, as difficult as it may be, to identify and reinforce the affective skills desired of program graduates. The first step in reviewing the affective skill development for any program is for the committee to identify those affective skills that they feel are most important to the occupation that the program typically trains for. To ascertain whether these affective skills are reinforced by the instructors through the curriculum, the committee can refer to the course outline, conversations with the instructor, the student evaluation form, the instructor's affective skills measurement techniques, and classroom visitations. C-2.3 contains a form which is useful in measuring the affective skills that are reinforced by the teacher/counselor.

3.0 Relevance of Occupations
- 3.1 What occupations should this program train for.
- 3.2 What occupations does the program train for.
- 3.3 What is the employment situation for these related occupations.
- 3.4 Are there any new or emerging occupations toward which the program should refocus its training emphasis.

Suggested review process: Instructors or admissions counselors can provide a list which identifies the occupations that each program trains for. This list can act as a springboard for discussions that will lead to the approval or refinement of the occupations for which each program should focus its training. If there is any uncertainty with respect to the duties associated with a particular occupation refer to the Dictionary of Occupational Titles. The regional planner for occupational education should be able to provide the committee with data on the job openings for various occupations.

4.0 Integration of Job Seeking Skills
- 4.1 Does the curriculum provide for instruction in areas such as how to seek and obtain employment, social security, workmen's compensation, the preparation of applications and resumes, acquisition of personal tools and equipment, appropriate grooming, employment testing, concepts of employer-employee relations, interviewing techniques and placement services available.
- 4.2 Are students formally evaluated with respect to their proficiency in job seeking skills.
- 4.3 Are these skills reinforced throughout the school year.

Suggested review process: Course outlines, lesson plans, student evaluation forms, classroom visitation and discussions with the instructor should reveal the level to which job seeking skills are integrated into the program curriculum.

5.0 Level of Curriculum Articulation
- 5.1 Is the curriculum organized so that student transfers between levels and areas may be facilitated with the least possible loss in time to students.

5.2 Is the curriculum articulated with more advanced or sophisticated programs.
5.3 Is the curriculum articulated with institutions that serve as feeder schools for the program.
5.4 Is the curriculum articulated with the purpose and activities of vocational youth organizations as co-curricular activities.
5.5 Is the curriculum articulated with related instruction particularly remedial coursework in the areas of reading and math.

Suggested review process: Conversations with the instructor and/or the regional planner for occupational education should help in identifying the level of articulation for each of the variables desired. The committee is also referred to the Articulation Module contained in this model.

6.0 Integration of Work Study Programs
6.1 What work study activities are being utilized by the program; e.g., internship, shadow program, cooperative education, Youth Employment Training Program (YETP), Targeted Jobs Tax Credit (TJTC), capstoning experiences, and general work experience.
6.2 How are students selected for work study programs.
6.3 Are students formally evaluated for work study activities and does this evaluation include the assessment of technical and affective skills.
6.4 Are the students adequately oriented for the work study experience.

Suggested review process: Course outline, conversations with the instructor, definitions of work study program and student evaluation forms can be used to determine the degree of involvement that work study has within the program curriculum.

7.0 Accommodation of Different Student Learning Rates
7.1 Are there provisions in the program curriculum to accommodate slow learners; e.g., individualized instruction, program learning packets, student aids or tutors, remedial programs.
7.2 Is there a liaison established with special education.

Suggested review process: Conversations with the instructor, inspection of teaching aides and classroom visitations will be useful in determining the level to which students with different learning rates are accommodated. See also the Special Education section of the Articulation Module.

8.0 Curriculum Format
8.1 Does the curriculum reflect objectives that are criterion referenced and student behavior oriented.
8.2 Are measurement techniques associated with each student performance objective.

8.3 Is the instructor involved in the ISSOE/V-TECS program.
8.4 Are the units of instruction modularized.
8.5 Are the students aware of what is expected of them in each class.
8.6 Are the students aware when they have gained proficiency in a skill or similated a theory.

Suggested review process: Course outlines, lesson plans, ISSOE/V-TECS materials, classroom visitations and conversations with the instructor should provide sufficient background materials to address the data requirements for this heading. As with the other headings, reference to the program objectives is important when determining the data needs of any measurement process.

Worksheet C-2.2

1978-197

EMPLOYABILITY PROFILE

Oswego County Board of Cooperative Educational Services
Mexico, New York 13114 Phone: 315-963-7251

ame____________________ Home School________________ Grade____

ourse BASIC AUTO BODY Date_________ Quarter 1st_2nd_3rd_Fina

The following is a list of entry level operations and skills that the above student has been exposed to. These operations have been accompanied by a significant amount of classroom work in related theory.

SHOP SAFETY
☐Safety rules
☐First aid
☐Protective clothing

WELDING
☐Read Rule
☐Set up Oxy.—acet. equipment
☐Braze sheet metal—horiz—o—lap
☐Braze sheet metal—vertical—o—lap
☐Braze sheet metal vert.—o—lap spot
☐~~Gas weld sheet metal~~ lap joint
☐Gas weld sheet metal flange joint
☐Gas weld sheet metal butt joint
☐Gas cut sheet metal
☐Electric spot weld sheet metal
☐Solder sheet metal

SHEET METAL
☐Use disc grinder
☐Rough out sheet metal
☐Filling with plastic
☐Use hand file board
☐Use pneumatic file board
☐Use body file
☐Shrinking metal
☐Use body hammers
☐Use body dollys
☐Use body picks
☐Fill with torch solder
☐Use Porto—Power
☐Straighten sheet metal
☐Use pneumatic panel tool
☐Repair rust out areas
☐Use rivet gun
☐Use electric shears
☐Repair with patch panels

☐R&R rocker panel
☐Use pneumatic wrench
☐Use damage dozer
☐R&R front fender
☐R&R door
☐Adjust front fender
☐R&R door panel
☐Adjust door
☐R&R hood
☐Adjust hood
☐R&R deck lid
☐Adjust deck lid
☐Use hydraulic hoist

REFINISHING
☐Apply PrepSol
☐Use D A sander
☐~~Sand off finish~~ ☐Use paint remover
☐Use metal conditioner
☐Masking
☐Use spray gun—maintenance
☐Spray primer
☐Apply sealer
☐Apply & block sand putty
☐Sand Primer
☐Use Tack Cloth
☐Apply color
☐Wet sanding
☐Use polisher
☐Read color code
☐~~Machine compound~~ new finish
☐Machine compound old finish
☐~~Spot refinish~~ acr lacquer
☐Blending
☐Complete—lacquer refinish process
☐Apply stripes

GLASS
☐R&R door vent window
☐R&R door glass
☐R&R quarter glass
☐R&R rear window
~~☐R&R windshield~~

TRIM
☐R&R mouldings
☐R&R door handle (outer)
☐R&R door handle (inner)
☐R&R door upholstery
~~☐R&R seats~~
☐R&R align bumper
☐Straighten & align bumpe

ELECTRICAL
☐R&R tail lamp assembly
☐R&R pkg. lamp assembly
☐R&R side lamp assembly
☐Repair wiring
☐R&R seal beam
☐R&R tail lamp bulb
☐R&R signal lamp bulb
☐Align headlamps

INTERNSHIP PROG.
☐Participated

WORKSTUDY PROG.
☐Paticipated

RATINGS: 1. Excellent 2. Good 3. Fair 4. Poor

QUALITIES	EXPLANATION	1	2	3	4	QUALITIES	EXPLANATION	1	2	3	4
Ability to learn	Quickness to learn and retain new ideas and methods					Personal growth	Ability to accept positive and negative criticism, demonstrates self-improvement				
Attendance	Regularity and punctuality					Employee obligations	Care of equipment, safe work habits, respect for company rules				
Appearance	Hygiene, grooming and appropriate dress					Initiative	Aggressiveness, resourcefulness, readiness to assume responsibility				
Attitude towards work	Interest, enthusiasm, willingness to do extra work					Quality of work	Accuracy and thoroughness				
ooperation	Ability to get along with people in various capacities, courtesy					Quantity of work	Amount of work accomplished				

dditional comments on strengths and/or limitations, special jobs performed, etc. ____________________

INSTRUCTOR ____________________

Affective Skill Measurement Worksheet

Worksheet C-2.3

Introduction

This worksheet can help identify the degree to which affective skills are integrated into the curriculum and reinforced in the classroom.

During a classroom visit or series of visits, the user should place a checkmark next to the affective skill each time it is reinforced by the curriculum or instructor (the list of affective skills can be altered to reflect the particular needs of a program).

1. Health and safety habits
2. Good work attitude
3. Reliability/punctuality
4. Personal grooming and dress
5. Ability to follow instructions
6. Pride in workmanship
7. Work area neatness
8. Self-starter
9. Does the instructor have a process to measure the affective skill development of students?

   Yes ____ No ____

10. Does the instructor include affective skills in the formal evaluation of students?

    Yes ____ No ____

Introduction

The purpose of this worksheet is to provide the consultant committee with a format which will assist them in reporting their review of the program curriculum. As with any of the procedures, forms or worksheets in this model, users are encouraged to adapt it to the particular needs of their institution.

Format Instructions:

1.0 Restate each of that major heading to be reviewed as listed in C-2.1.

2.0 Develop a narrative response, identifying the specific strengths and weaknesses for each major heading, using the questions listed in that major heading and the program objectives as guidelines. Also include in the narrative the process used to draw the conclusions.

3.0 Following each narrative, list appropriate and specific recommendations. The consultant committee is reminded that these recommendations are advisory in nature.

4.0 Provide a summary at the end of the report with recommendations listed in order of priority for implementation consideration.

5.0 Submit a report to the Institutional Advisory Council for Occupational Education, the respective instructor and the program supervisor.

Major Heading

Narrative: measurement process and strength and weakness

Recommendations

Facilities, Equipment and Supplies

Rationale:

The meaningful evaluation of facilities, equipment and supplies should not be taken lightly by any institution due to the substantial capital outlay that is associated with these areas. The more comprehensive and broad based such evaluations are, the more creditable the background data will be for the citizentry that holds institutions accountable. In addition, proposals for equipment and facilities' modification/expansion that seek funding from federal or state sources have become fairly sophisticated with respect to the types and level of background information requested. Therefore, the better the supportive data the greater the likelihood that quality proposals can be submitted and comprehensive accountability reports can be prepared to satisfy follow-up inquiries. However, more important than these accountability concerns is the desire of an institution to maintain programs that are adequate and appropriate as changes take place in technology, instructional technique, the labor market, and the number and type of students that enroll in occupational programs. For this reason, more than any other, institutions should annually review the relevance of their facilities, equipment and supplies.

As with the curriculum, evaluation consultant committees will be used as the principle means by which these criteria will be evaluated. Feedback from other individuals such as administrators, instructors, students and other individuals employed in the occupation can be solicited by modifying the instruments presented in this module.

The two important variables that need to be considered when reviewing the adequacy and appropriateness of facilities are the size and the type of space which is assigned to each program. The user is reminded that the facilities are to be evaluated from the individual program perspective; that is, focusing how the facility meets the specific needs of individual programs rather than how it serves the entire student body or accommodates the needs of the total occupational staff. Equipment, which is generally expected to have a useful life of seven to ten years, and supplies, which usually have a shelf life of one year or less, are generally identified with a specific program and therefore can be evaluated with respect to an individual program with less ambiguity.

Consideration of the instructional objectives and methodology are essential to a meaningful evaluation for these criteria. That background information together with the related program objectives will form the standards against which the evaluation can take place. A list of sample program objectives that can be identified for the criteria of facilities, equipment and supplies include the following:

- That the consultant committee will annually review the facilities, equipment and supplies as it relates to an individual occupational program.

- That a Vocational Education Act (VEA) proposal will be developed which will request funding for specified program equipment.

- That the equipment in Program XYZ will meet the needs of the curriculum.

- That fire and safety violations for Program XYZ as determined by the fire and insurance inspections be less than two.

SUBJECT: Facilities, Equipment and Supplies

RESPONSIBILITY	ACTION
Program administrator and instructor.	1.0 Identify/develop the program objectives that relate to curriculum. 1.1 See program objectives packet. 1.2 Review Worksheet FES-1.1 and FES-2.1. 2.0 Determine the types of information to be collected. 2.1 Review the program objectives identified in 1.0, and list all of the data types that will be necessary to make the analysis. 3.0 Orientate consultant committees to facilities, equipment and supplies review process. 3.1 Ideas that are useful in organizing consultant committees are presented in Job Outline C-1. 3.2 A structure useful in preparing consultant committees for facilities and instructional space review is presented in Job Outline FES-1. 3.3 A structure that is useful in preparing consultant committees for equipment and supplies review is presented in Job Outline FES-2.
Consultant committees.	4.0 Perform the facilities, equipment and supplies review. 4.1 Topics to be addressed and a suggested process for instructional space and facilities evaluation is given in FES-1.1. 4.2 Topics to be addressed and a suggested process for evaluating equipment and supplies are given in FES-2.1.
Program administrator, instructors and consultant committees.	5.0 Compare the results with identified objectives. 5.1 Refer to objectives developed in 1.0. 6.0 Prepare and submit report on facilities, equipment and supplies review. 6.1 Indicate successes with program objectives. 6.2 Indicate obstacles/roadblocks to achieving objectives. 6.3 Make recommendations for future objectives. 6.4 Indicate improvements in measurement strategies and data collection instruments and processes.

Purpose:

This section is designed to give consultant committees a structure for evaluating facilities as they relate to individual programs. It assumes that the advisory/consultant committee apparatus is in place at the institution (suggestions for consultant committee refinement are provided in Section C-1). The worksheets presented are designed for consultant committees but may also be used to gather feedback on facilities from instructors, students, supervisors, the community and other individuals employed in related occupations. Below is a brief summary of each of the worksheets included in this section.

FES-1.1	Instructional Space and Facilities Evaluation - This worksheet contains a list of variables that may be considered when evaluating a facility from a program's perspective, and a suggestion for performing the evaluation.
FES-1.2	Safety Program Checklist - This worksheet contains a checklist of items which identifies the safety precautions/procedures undertaken by a program. While many of the items in the checklist focus on Trade and Industrial programs, there remains enough carryover for it to be relevant to all occupational programs.
FES-1.3	Instructional Support Materials Evaluation - This worksheet may be used to review textbooks, workbooks, programmed instructional materials, audio visual materials and other instructional support materials.

The following are the instructions for this Job Outline:

1.0 Make each consultant committee aware of its charge as it relates to facilities evaluation.
  1.1 See consultant committee bylaws.
2.0 Present to each consultant committee the institutional and program objectives that relate to facilities.
3.0 Summarize for the consultant committee significant findings found in other evaluative criteria reports; e.g., employer satisfaction, student placement, cost/benefit, curriculum, etc.
4.0 Based on the consultant committees charges (1.0) and the institutional and program objectives, determine the variables that will be addressed by this facility review.
  4.1 FES-1.1 contains a list of variables that should be considered in reviewing a facility. Although many of the items listed may be extraneous to a particular program, the list contains a basis for the users to identify the variables pertinent to their facilities review objectives.

5.0 Using the variables agreed upon in 4.0, each consultant committee will review the facility from the standpoint of the program with which they are associated.

6.0 Each consultant committee will report their findings in writing to the institutional advisory council, the program administrator and the program instructor.

Instructional Space and Facilities Evaluation*

Worksheet FES-1.1

Introduction

This worksheet can be referred to by a consultant committee or other individuals capable of giving pertinent feedback to identify the variables that will be useful in evaluating the facilities and instructional space for a specific program. The institutional and program objectives should be used as guidelines in selecting the items which will best suit the evaluation of these criteria. The user is again reminded that they are to review the facilities from the perspective of an individual program rather than from the perspective of its accommodation of the entire student body or instructional staff.

Since each of the items listed below are given in statement form, this worksheet could also serve as an instrument to rate the variables selected.

Date of Evaluation ________________ Program Area ______________________

Name of Laboratory or Instructional Space ______________________

Name(s) of Evaluator(s) Title

___________________________________ ______________________

___________________________________ ______________________

Evaluation Code: 1. Very adequate 3. Less than adequate
2. Adequate 4. Very inadequate

	EVALUATION RATING NUMBER
1. Utilities such as gas, air, water, and electricity are adequate and available at appropriate locations.	________
2. Classrooms, laboratories, shops, and other instructional space are adequate in size, location, arrangement, and facilities to provide for safe, orderly, and effective instruction.	________
3. An area shielded from distractions and adequately soundproofed is provided for instruction in occupational theory.	________
4. The location of instructional areas eliminates undue interference with or from other school activities.	________
5. Adequate visual control and supervision of all instructional areas is possible.	________
6. Provisions have been made for appropriate floor markings in laboratories and other facilities, identifying aisles, work stations, potential hazards, and traffic patterns.	________
7. Ample space is provided for a free flow of traffic in classrooms, laboratories, and shops.	________
8. An adequately located, furnished and equipped office area is provided for instructors for planning, for keeping records, and for consultation and administration.	________

9. Space and facilities are provided for storage of scrap and salvage, student work in progress, instructional supplies, and movable tools and equipment. ______
10. Suitable, safe storage is provided for flammables, chemicals, and gases. ______
11. Appropriate first aid supplies are available and readily accessible in the classroom or instructional area. ______
12. Appropriate fire extinguishing equipment is available and conveniently located. ______
13. Adequate exhaust equipment is provided as needed in all instructional areas. ______
14. Instructional areas are clean, orderly, attractive and maintained in accordance with good occupational practice. ______
15. Acoustics, light, heat, air conditioning and ventilation are adequate throughout to protect health and provide good working conditions. ______
16. Program space has appropriate entrances and exits to each facility based on:
    a. The size requirements of equipment. ______
    b. The nature of vehicles or other machines on which work is to be performed. ______
    c. The size of items to be fabricated within the work space. ______
17. All corridors and doors to classrooms are of sufficient width to allow easy movement of demonstration equipment in and out of rooms. ______
18. Where customer work is to be part of the instructional program, provisions are made for receiving, storing and delivering work with the least inconvenience to the instructor. There should also be provisions for maintaining records. ______
19. All laboratory facilities which require student change of clothing and cleanup are self-contained with locker, shower and lavatory facilities. ______
20. Flooring materials utilized in each laboratory or shop are appropriate to the nature of the learning activities within the facility. ______
21. Specific areas and equipment are color coded for safety purposes. ______
22. Emergency showers for acid and other injuries are readily accessible where needed. ______

*Adopted from "Instruments and Procedures for the Evaluation of Vocational/Technical Education: Institutions and Programs" (Pilot Test Edition), National Study for the Accreditation of Vocational/Technical Education, Washington, D. C.: American Vocational Association, 1971.

Safety Program Checklist*

Introduction

Developing a series of procedures and a mindset for safety are characteristics that all students should leave an occupation training program with. The checklist provided here helps the user identify areas for safety concern in student apparel, the physical plant, tools and equipment and the instructional program. This last category may be helpful in reviewing the safety concerns registered in the curriculum section (C-2.1).

As with the Instructional Space and Facilities Worksheet (FES-1.1), this checklist can be used to identify safety variables and as a safety rating sheet.

Date of Evaluation ____________ Program Area ____________________

Name of Laboratory or Instructional Space ____________________

Name(s) of Evaluator(s) ____________________ Title ____________________

____________________ ____________________

Evaluation Code:
1. Very adequate
2. Adequate
3. Less than adequate
4. Very inadequate

	EVALUATION RATING NUMBER
A. Student Apparel	
1. Safety glasses for all students	______
2. Face shields at power tools	______
3. Respirators for dusty conditions	______
4. Coveralls laundered regularly	______
5. Jewelry removed when operating machines	______
6. Leather gloves for hot and rough work	______
B. Physical Plant	
1. Adequate lighting	______
2. General ventilation	______
3. Exhaust systems	______
4. Well marked exits	______
5. Doors open outward	______
6. Skid resistant treatment on the floor	______
7. Marked safety zones	______
8. Grounded electrical service	______
9. Dry power fire extinguisher	______
10. CO_2 fire extinguisher for electric fires	______
11. Spring lid metal container for wiping rags	______
12. Trash dumped daily	______
13. Absorb-all type materials for grease and oil on floor	______
14. No gasoline stored in the shop	______
15. Adequately stocked first aid kit	______
16. Master locking system for all power tools	______
17. Marked danger zones	______
C. Tools and Equipment	
1. Color coded equipment	______
2. Safety guards and shields in place	______

Safety Program Checklist

Worksheet FES-1.2
(Page 2)

C. Tools and Equipment (cont.)
   3. Tools sharp __________
   4. Tools in proper adjustment __________
   5. Safety stands for mechanics __________
   6. Push sticks for saws and jointers __________
   7. Parts washer with a safe solvent __________
   8. Fire blankets __________
   9. No smoking signs __________
   10. Scrap barrels __________
   11. Metal cabinet for paint __________

D. Instruction Program
   1. Teacher in the shop during work periods __________
   2. Assignments on tool use __________
   3. Students provided with copies of safety rules __________
   4. Safety tests administered and filed __________
   5. Demonstrations given __________
   6. Permission slips from parents __________
   7. Organized cleanup program __________
   8. Assigned shop safety engineer __________
   9. Organized safety committee __________
   10. Safety inspections __________
   11. Posted safety rules __________
   12. Posted safety posters and charts __________
   13. Instruction in artificial respiration __________
   14. Accident report forms used __________
   15. Organized procedure to follow in case of accidents __________
   16. Operators manuals available __________

*Developed by W. Forrest Bear and contained in "Evaluation Sheets in Agricultural Mechanization Programs," a paper presented at the 1970 winter meeting, American Society of Agricultural Engineers; St. Joseph, Michigan, American Society of Agricultural Engineers, 1970.

Instructional Support Materials Evaluation* Worksheet FES-1.3

Introduction

This worksheet may be used to review textbooks, workbooks, programmed instructional materials, audio-visual materials and other instructional support materials. The user should select the items that are pertinent to the materials being reviewed (because of the variety of support materials, one set of survey items will not satisfy them all), as well as those which provide the appropriate data to measure the related program objectives.

General	Yes	No
Is the material consistent with course or program objectives	☐	☐
Is the material technologically accurate	☐	☐
Is the material up-to-date	☐	☐
Is the material free from racial and sexual bias	☐	☐
Is the reading level appropriate to the grade level of the users	☐	☐

Any "no" response should be accompanied by an explanation.

Content and Organization	Poor				Excellent
Content is arranged sequentially	1	2	3	4	5
Text is adequately illustrated	1	2	3	4	5
Table of contents provides ready reference	1	2	3	4	5
Occupational information is representative of that field	1	2	3	4	5
Unfamiliar technical terms defined and explained	1	2	3	4	5
Contains meaningful and challenging study questions or activities	1	2	3	4	5
Freedom from unnecessary detail (charts or graphs)	1	2	3	4	5
Convenience for use (charts or graphs)	1	2	3	4	5
The manual correlates with the textbook	1	2	3	4	5
The activities are varied and stimulating for the students (lab manual)	1	2	3	4	5
The instructions are clear (programmed instruction)	1	2	3	4	5
Continuous involvement of the learner (programmed instruction)	1	2	3	4	5
Allows response from learner	1	2	3	4	5
Provides for help from instructor	1	2	3	4	5

*Adapted from "Local Leader Guide #8" by Tim Wentling, University of Illinois, Illinois Office of Education, 1976.

Consultant Committee Equipment and Supplies Review

Purpose:

This section is designed to give consultant committees a structure for evaluating the equipment and supplies that are associated with individual programs. It assumes that the advisory/consultant committee apparatus is in place at the institution (suggestions for consultant committee refinement are provided in Section C-1). The worksheets presented here are designed for consultant committees but may also be used to gather feedback on equipment and supplies from instructors, students, supervisors, the community and other individuals employed in related occupations.

There are two important issues that must be considered when reviewing equipment and supplies. First, do the equipment and supplies used in training students adequately reflect the needs of business and industry and secondly, are these equipment and supplies properly maintained.

Below is a brief summary of the worksheets included in this section.

FES-2.1	Supplies and Equipment Evaluation - This worksheet offers a series of statements that probe with some detail the relevancy and acceptability of the equipment and supplies.
FES-2.2	Sample Equipment Evaluation Form - This worksheet provides a framework through which the relevance and acceptability of each piece of equipment can be commented on.

The following steps will outline for the consultant committee a process to review the equipment and supplies of the program.

1.0 Make the consultant committee aware of its charge as it relates to equipment and supplies evaluation.
    1.1 See consultant committee bylaws.
2.0 Present to the consultant committee the institutional and program objectives that relate to equipment and supplies.
3.0 Summarize for the consultant committee significant findings in other evaluative criteria reports; e.g., employer satisfaction, facilities evaluation, curriculum, cost/benefit, etc.
4.0 Based on the consultant committee charges and institutional and program objectives, determine the variables that will be addressed by this equipment and supply review.
    4.1 Review Worksheet FES-2.1 and FES-2.2. Although many of the items listed in these worksheets may be extraneous to a particular program, the list contains a basis for the users to identify the variables pertinent to their equipment and supplies review objectives.
5.0 Using the variables agreed upon in 4.0 each consultant committee will review the equipment and supplies from the standpoint of the program with which they are associated.
6.0 Each consultant committee will report their findings in writing to the institutional advisory council, program administrator and program instructor.

Supplies and Equipment Evaluation* Worksheet FES-2.1

Introduction

This worksheet is designed to give the user a series of items over which the relevancy and acceptability of a program's equipment and supplies can be judged. It can be used as an independent rating sheet or in conjunction with FES-2.2. A list of each program's equipment is given in C/B-3.

Date of Evaluation ____________ Program Area ____________

Name of Laboratory or Instructional Space ____________

Name(s) of Evaluator(s) ____________ Title ____________

____________ ____________

____________ ____________

Evaluation Code: 1. Very adequate 3. Less than adequate
2. Adequate 4. Very inadequate

	EVALUATION RATING NUMBER
1. Seating and work stations in shops or classes are sufficient in number to meet needs of the largest class. There is a satisfactory ratio of students to work stations.	________
2. The shops or laboratories are adequately equipped for all phases of the occupation for which the training is being given.	________
3. Shop tools, supplies, machinery and equipment are of the grade and type currently used in the occupation for which instruction is being given; if simulation is used, it is comparable with occupational requirements.	________
4. Equipment that becomes obsolete is immediately disposed of and is not allowed to clutter up instructional or storage space.	________
5. The type, variety, and quantity of machines, tools and equipment are such that basic as well as current manipulative skills needed for employment can be easily demonstrated and practiced.	________
6. Tool storage and stockroom systems approximate those used in the occupation taught, and provide for systematic and orderly storage, dispensing, maintenance, replacement and inventory control.	________
7. Instructors are able to obtain supplies, materials, and repair services as needed to maintain continuity of instruction.	________
8. Adequate provision is made for securing emergency repairs, equipment and supplies.	________
9. Arrangement of machines and equipment is well planned for instructional purposes. It permits a planned and logical flow of work as suggested by an industrial work-flow study.	________

10. Spacing between the equipment is sufficient for the safe handling of materials used in the training. ________

11. Equipment is maintained in good condition so as to provide for optimum learning. ________

12. Supplies and equipment are handled and stored in accordance with good safety practices. ________

13. Safety clothing and protective devices are provided, readily available, and used. ________

14. All power machines and manually operated equipment are provided with acceptable safety guards (mechanical/electrical); the guards are used by student and faculty operators at all times. ________

15. Prior to enrollment, students are informed of all supplies they are required to purchase, where such supplies may be obtained, and how much they cost. ________

16. Except as noted in "15" above, all supplies necessary for instruction are provided for students. ________

*Adopted from "Instruments and Procedures for the Evaluation of Vocational/Technical Education: Institutions and Programs" (Pilot Test Edition), National Study for the Accreditation of Vocational/Technical Education, Washington, D. C.: American Vocational Association, 1971.

Sample Equipment Evaluation Form*

Worksheet FES-2.2

Introduction

This form can be used to respond to the relevancy and acceptability of each piece of equipment assigned to a program. For a list of items that address the concepts of relevancy and acceptability see FES-2.1. A listing of the equipment by program is given in C/B-3.

Date of Evaluation ____________ Program Area ____________

Name of Laboratory or Instructional Space ____________

Name(s) of Evaluator(s) Title

____________ ____________

____________ ____________

CONSULTANT COMMITTEE EVALUATION					
Listing of Equipment (See C/B-3)	Equipment		Condition of Equipment		Recommendations
	No Longer Used in Job Setting	Still Being Used in Industry	Acceptable	Not Acceptable	
Other tools or major equipment the employee must be able to operate in industry and which are not on this list.					

*Adopted from "Planning, Implementing and Evaluating Career Preparation Programs," Dwight Davis and Joe Borgen, McKnight Publishing Co., Bloomington, Illinois, 1974.

Employer Satisfaction

Rationale:

Since placement is an important goal to occupational education, employers are in a unique position to offer pertinent feedback to program planners and decision-makers. The major focus of this packet is to obtain input from employers on graduates and the world of work so that programs can be kept both relevant and of high quality. This packet offers procedures to collect four general types of data from employers:

1. Their assessment of the student's technical skills.
2. Their assessment of the student's affective skills (attitude, reliability, ability to follow instructions, etc.).
3. Their identification of the types of skills required for specific occupations in their firm, and
4. The projected manpower needs for various occupations within their firm.

Survey response is the method suggested by this packet for collecting the data. A series of sample survey forms are included in this section to assist users in developing a questionnaire (both form and content) pertinent to their needs. The survey content should of course relate to the objectives set for the program. Sample objectives that may be helpful to the user in setting the actual program objectives include:

- That 90% of all students which graduate from Program XYZ and that are placed will have adequate technical skills.
- That affective skills of 75% of Program XYZ students placed will be rated as satisfactory or better by the employer.
- That within one year of graduation employer satisfaction data will be collected on 90% of Program XYZ students placed.
- That manpower projections will be aggregated for at least 85% of the firms which have recent Program XYZ graduates employed.

SUBJECT: Employer Satisfaction

RESPONSIBILITY	ACTION
Program administrators and instructors.	1.0 Identify the program objectives that relate to employer satisfaction. 1.1 If program objectives have not been developed or are incomplete, refer to objectives development packet. 1.2 For additional information on objectives development, review the survey forms contained in Job Outline ES-1. 2.0 Determine the types of information to be collected. 2.1 Review the objectives identified in 1.0 and list the types of data that will be necessary to make the analysis. Familiarity with the forms presented in Job Outline ES-1 will be helpful.
Placement coordinators, administrators and instructors.	3.0 Develop, adopt or adapt the survey instrument(s) that can be used to gather data to measure the above identified objective(s). 3.1 For sample surveys addressing both form and content see Job Outline ES-1. 3.2 Pilot the final draft of the selected survey. 4.0 Administer the survey instrument. 4.1 Determine the procedure to administer the survey - mail, telephone or personal interview. 5.0 Tabulate the survey results. 5.1 The process for tabulating the survey's results should be considered when the instrument is being developed.
Program administrators and instructors.	6.0 Compare the results with the above identified program objectives. 6.1 Refer to the objectives identified in 1.0. 7.0 Prepare and submit a report. 7.1 Identify the success/failure rate with the identified objectives. 7.2 Make recommendations for future objectives. 7.3 Make recommendations for improved data collection methodologies.

Purpose:

This section is designed to help users select/design an instrument which will collect the types of data that they need to measure the program objectives that relate to employer satisfaction. A series of instruments which offer several examples of format and content provide the basis upon which ideas can be generated. Because specific program objectives will dictate the types of data necessary, the user is encouraged to review each of the instruments presented and adopt/adapt a survey with which they are comfortable and which satisfies their information needs.

The following is a brief overview of each of the sample instruments:

ES-1.1 Draft of New York State Education Department Employer Satisfaction Survey - This instrument is the latest draft of the form to be used by the Occupational Education Reporting System (OERS) for New York State. It includes an introductory note, scaled responses to technical and affective skills statements, and space for some general comments.

ES-1.2 Employer Follow-Up Survey of Career Program Students - This instrument includes an opportunity to identify a reason for the employee leaving the firm (if appropriate), reactions to the interview, and a few general statements addressing entry level and rate of improvement skills.

ES-1.3 Example of Employer Evaluation of Program Graduate - This form focuses on a specific program area (Food Service). It requests feedback on general affective skills and on a series of specific technical skills that are needed by the firm and that the graduate has performed. If this format is to be used for other program areas, course outlines, ISSOE performance objectives or employability profiles (see C-2.2) could be used to develop the content.

Job Outline Instructions:

1.0 Determine the specific data requirements necessary to measure the program objectives related to Employer Satisfaction.
  1.1 Review the Employer Satisfaction program objectives.
2.0 Design an instrument which satisfies those data requirements.
  2.1 Review ES-1.1 through ES-1.3.
  2.2 Select a format which is compatible with institutional procedures, is not prohibitive with respect to tabulation, and will not frustrate, confuse or overburden the respondent.
  2.3 Select content that satisfies data needs for the program, institution and projected New York State requirements.
3.0 Pilot the agreed upon instrument.

FROM:

TO:

EMPLOYER FOLLOW-UP SURVEY

We are conducting a follow-up study of graduates from the class of (   ). The purpose of this study is to obtain information which will assist us in improving program planning and administration. As an employer of our graduates, your opinions are among the most valuable information which we will receive.

Please have the immediate or other supervisor complete this brief questionnaire regarding ______________________________ who has permitted us to contact you for your opinion of the effectiveness of the occupational education program he/she participated in at our school. The information provided will be held in strict confidence. Neither you, the employee or your organization will be identified in final reports of this study.

Your cooperation in completing this survey and returning it to the below address within two weeks will be greatly appreciated. (Please fold the questionnaire with the return address on top). If you have any questions about this survey, please feel free to contact me at the number listed above.

Thank you for your cooperation.

OERS PROCESSING CENTER
CENTRAL NEW YORK REGIONAL COMPUTER CENTER
314 LAKESIDE ROAD
SYRACUSE, NEW YORK 13209

Draft of New York State Education Department Employer Satisfaction Survey

Worksheet ES-1.1

	EXCELLENT	GOOD	FAIR	POOR	DOES NOT APPLY
A. SKILLS & KNOWLEDGE					
1. Level of Knowledge	☐	☐	☐	☐	☐
2. Performance of Skills Required by the Job	☐	☐	☐	☐	☐
3. Understanding of Theory	☐	☐	☐	☐	☐
4. Ability to Use Equipment Required by the Job	☐	☐	☐	☐	☐
5. Demonstrates Communication Skills (Verbal and/or Written) as Required by the Job	☐	☐	☐	☐	☐
6. Ability to Complete Assigned Tasks Within Quality Standards and Established Time Limits	☐	☐	☐	☐	☐
B. WORK ATTITUDES AND PERSONAL CHARACTERISTICS					
1. Well groomed	☐	☐	☐	☐	☐
2. Dependability	☐	☐	☐	☐	☐
3. Willingness to Learn	☐	☐	☐	☐	☐
4. Punctuality	☐	☐	☐	☐	☐
5. Attendance	☐	☐	☐	☐	☐
6. Cooperative with Co-workers	☐	☐	☐	☐	☐
7. Cooperative with Supervisors	☐	☐	☐	☐	☐
8. Completes Work with Minimum Supervision	☐	☐	☐	☐	☐
9. Resourceful (in completing work, solving work problems)	☐	☐	☐	☐	☐
10. Takes Direction and Criticism	☐	☐	☐	☐	☐
11. Complies with Company Policies	☐	☐	☐	☐	☐

C. WHAT IS YOUR OVERALL RATING OF THE TRAINING RECEIVED BY THE GRADUATE AS IT RELATES TO THE REQUIREMENTS OF HIS/HER JOB?

1. Did your company have to provide this person with further training so that he/she could fulfill the requirements of the job? YES ☐ NO ☐

   a) If yes, does your company, as a general policy, require that all new employees participate in such a training program? YES ☐ NO ☐

D. AS A RESULT OF THIS EMPLOYEE'S EDUCATION PROGRAM HOW WOULD YOU RATE THE JOB PREPARATION IN RELATION TO OTHER EMPLOYEES WITHOUT SUCH TRAINING? ☐ ☐ ☐ ☐ ☐

E. WHAT SUGGESTIONS DO YOU HAVE FOR IMPROVING THE TECHNICAL AND/OR PERSONAL SKILLS OF FUTURE GRADUATES ____________________

____

Employer Follow-Up Survey of Career Program Students* Worksheet ES-1.2

MR. EMPLOYER: You can render a vital service to public school education by answering a few questions concerning the following employee:

1. Is ______________________________ an employee of yours? Yes ___ No ___

If no -
a. Was this person ever employed by you?
Yes ___ No ___
If yes -
b. For how long? ______________________
(Number of Months)
c. Reason for leaving your employ?
____
d. Name and address of his current employer (if known).
____
____
(Complete all questions 2-6 as best you can)

If yes, continue below.

2. When interviewing this person, were you aware that he had received training in a vocational technical training program? Yes ___ No ___

3. How much did the person's vocational or technical training influence your decision to hire him? Very much _____; Much _____; Some _____; Little _____; None _____.

4. Check any of the following inadequacies you noted about the person when he applied for the job.

_____ Did not make a favorable first impression
_____ Lacked essential communication skills
_____ Was improperly dressed
_____ Lacked a positive attitude about the job and working in general
_____ Lacked performance skills essential for the job
_____ Lacked experience required for the job
_____ Lacked maturity
_____ others (please specify) ______________________________
_____ noted no inadequacies

If you do not personally supervise this employee, ask the person who does to assist you in completing questions 5 and 6.

5. To what extent did the person demonstrate the following traits when he was first employed by your company?

	Very Much	Much	Some	Little	None
a. Demonstrated the skills and abilities needed for the job	___	___	___	___	___
b. Demonstrated positive attitudes toward the job	___	___	___	___	___

	Very Much	Much	Some	Little	None
c. Demonstrated ability to work with minimum supervision	____	____	____	____	____
d. Demonstrated problem-solving abilities	____	____	____	____	____
e. Demonstrated cooperative working relationships	____	____	____	____	____

6. To what extent has this person progressed in competency in the following traits since becoming an employee of your company?

	Very Much	Much	Some	Little	None
a. Progressed in essential skills and abilities	____	____	____	____	____
b. Progressed in attitude toward the job	____	____	____	____	____
c. Progressed in ability to work with minimum supervision	____	____	____	____	____
d. Progressed in problem-solving abilities	____	____	____	____	____
e. Progressed in cooperative working relationships with other employees	____	____	____	____	____

7. Name of Firm ________________________________
Address ________________________________

YOUR PROMPTNESS IN RETURNING THIS QUESTIONNAIRE

IS IMPORTANT!

THANK YOU FOR YOUR HELP

---

*Adapted from Employer Survey used by North Carolina Research Coordinating Unit, Box 5312, Raleigh, North Carolina 27607.

Example Employer Evaluation of Program Graduate* Worksheet ES-1.3

(FOOD SERVICE OCCUPATIONS)

CONFIDENTIAL: The information reported in this survey will be used for career program planning purposes only, and the source of the information will not be divulged to any other agency or party.

1. Employee ____________________
2. Program from which employee graduated ____________________
3. Name of employing organization ____________________
4. Mailing address of organization ____________________ ZIP __________
5. Name of respondent __________ Telephone number of respondent (AC) ______
6. Total number of employees in your organization _____ your department _____
7. Primary product(s) ____________________

Please rate the general traits of the employee according to those listed below. Circle the rating on the following scale.

			low			average			high	
A.	Integrity: trustworthiness, honesty, loyalty	1	2	3	4	5	6	7	8	9
B.	Dependability: promptness, reliability in attendance	1	2	3	4	5	6	7	8	9
C.	Responsibility: willingness with which work accepted is performed	1	2	3	4	5	6	7	8	9
D.	Judgment: ability to make sound decisions	1	2	3	4	5	6	7	8	9
E.	Cooperation: ability to work with others in harmony	1	2	3	4	5	6	7	8	9
F.	Leadership: ability to understand people and direct others	1	2	3	4	5	6	7	8	9
G.	Attitudes toward work: enthusiasm with which work is performed	1	2	3	4	5	6	7	8	9

TASK LIST FOR COMMERCIAL COOKING AND FOOD SERVICE

Please rate the importance of knowing each skill listed below and then rate the employee according to his performance of the tasks which apply to his or her work.

ORIENTATION to FOOD SERVICE OCCUPATIONS

	need to know*	performance of skill**
Take orders from superiors	U D E	VA A I CD

DIETETICS and NUTRITION

Identify basic food groups	U D E	VA A I CD

*U = Unnecessary D = Desirable E = Essential
**VA = Very Adequate A = Adequate I = Inadequate CD = Cannot Determine

Example Employer Evaluation of Program Graduate

Worksheet ES-1.3
(Page 2)

	need to know*			performance of skill**			
DIETETICS and NUTRITION (cont.)							
Make calorie counts	U	D	E	VA	A	I	CD
Plan basic menus for one week	U	D	E	VA	A	I	CD
Identify primary nutrients in various foods	U	D	E	VA	A	I	CD
SERVING FUNDAMENTALS							
Handle food, beverages, equipment, utensils, table settings, etc., in a way to avoid contamination	U	D	E	VA	A	I	CD
Acquire napkins, utensils, plates, etc., from proper locations	U	D	E	VA	A	I	CD
Set tables for dinners, parties, etc., as required	U	D	E	VA	A	I	CD
Carry filled trays	U	D	E	VA	A	I	CD
Observe safety precautions in food handling	U	D	E	VA	A	I	CD
Keep serving areas clean and uncluttered	U	D	E	VA	A	I	CD
Inspect equipment and utensils for cleanliness and sanitation	U	D	E	VA	A	I	CD
Know sanitation laws	U	D	E	VA	A	I	CD
SANITATION and SAFETY							
Identify areas where safety equipment is located, e.g., fire blankets, and extinguishers	U	D	E	VA	A	I	CD
Shut off main electrical switch when cleaning equipment	U	D	E	VA	A	I	CD
Keep equipment, utensils, etc., in neat, orderly arrangement	U	D	E	VA	A	I	CD
Identify faulty steam valves and equipment	U	D	E	VA	A	I	CD
Identify faulty electrical equipment	U	D	E	VA	A	I	CD
MAINTENANCE and HOUSEKEEPING							
Sort, count, and store utensils in designated areas	U	D	E	VA	A	I	CD
Lubricate power equipment as necessary	U	D	E	VA	A	I	CD
Police area to see that hazards do not exist	U	D	E	VA	A	I	CD
Keep utensils sharp and equipment in good working order	U	D	E	VA	A	I	CD
Replace worn or dull blades on slicers, cutters, peelers, etc.	U	D	E	VA	A	I	CD
INTRODUCTION to COMMERCIAL KITCHEN EQUIPMENT							
Select proper equipment for job desired	U	D	E	VA	A	I	CD
Identify each piece of equipment by appropriate name	U	D	E	VA	A	I	CD

*U = Unnecessary D = Desirable E = Essential

**VA = Very Adequate A = Adequate I = Inadequate CD = Cannot Determine

Example Employer Evaluation of Program Graduate

Worksheet ES-1.3
(Page 3)

	need to know*			performance of skill**			
INTRODUCTION to COMMERCIAL KITCHEN EQUIPMENT (cont.)							
Operate electrical controls in kitchen for food preparation	U	D	E	VA	A	I	CD
BASIC TECHNIQUES of FOOD PREPARATION							
Read recipes and follow procedures	U	D	E	VA	A	I	CD
Measure food quantities and weights accurately	U	D	E	VA	A	I	CD
Know food preparation terminology	U	D	E	VA	A	I	CD
Peel, seed, and chop vegetables and fruits	U	D	E	VA	A	I	CD
Prepare meats for cooking	U	D	E	VA	A	I	CD

*U = Unnecessary D = Desirable E = Essential
**VA = Very Adequate A = Adequate I = Inadequate CD = Cannot Determine

*Adopted from survey used by: Springfield Area Vocational Center,
Springfield, Illinois.

Student Demand

Rationale:

Student demand like placement is a very visible and straightforward criterion for program evaluation. If the enrollees are not there, the course or program is dropped. In more marginal situations when the number of enrollees borders the minimum amount predefined for a program, a series of questions need to be asked. What is the reason(s) for low enrollments? Are jobs available in the field? Are graduates obtaining employment? What is the dropout rate? Should a recruitment blitz be mounted? Should articulation/cooperation with feeder schools be improved? How does this program measure up with respect to the other evaluation criteria?

Student demand will impact on secondary programs, but should be particularly useful to post-secondary and adult programs where the stability of courses/programs is much more fragile. As with other evaluation criteria the program objectives will define the types of measurement data that should be collected. Samples of program objectives for student demand include the following:

- That at least 90% of the students seeking enrollment in Course XYZ will be admitted.
- That the enrollment for Course XYZ will be at least 15 when measured 4 weeks after the beginning of classes.
- That at least 20% of the enrollment in Program XYZ will be female.
- That 75% of the courses offered will attract enough students to run.
- That at least 20% of the enrollment in Program XYZ will be of a minority ethnic background.

SUBJECT: Student Demand

RESPONSIBILITY	ACTION
Program administrators and instructors.	1.0 Identify the program objectives that relate to student demand. 1.1 If program objectives have not been developed or are incomplete, refer to the program objective package. 1.2 For additional information or suggestions on program objectives, review Worksheet SD-1.3. 2.0 Determine the types of information to be collected. 2.1 Review the objectives identified in 1.0 and list the types of data that will be necessary to make the analysis.
Registrar, administrators and instructors.	3.0 Develop, adopt or adapt a survey instrument(s) that can be used to gather the data to measure the above identified objectives. 3.1 For sample survey items and rating scale suggestions see Job Outline SD-1. 4.0 Administer the survey instrument. 5.0 Tabulate and aggregate the survey results. 5.1 The process for tabulating the survey's results should be considered when the instrument is being developed.
Program administrators and instructors.	6.0 Compare the results with the above identified program objectives. 6.1 Refer to the objectives identified in 1.0. 7.0 Prepare and submit a report. 7.1 Identify the success/failure rate with the identified objectives. Reasons for successes or failures should be included in this section. 7.2 Make recommendations for future objectives. 7.3 Make recommendations for improved data collection methodologies.

Student Demand Data Options

Purpose:

This section is designed to suggest types of data that may be useful in measuring student demand objectives. For the most part the data necessary is fairly straightforward and is typified by the State Education Department's requirements (SD-1.1). Below is a brief summary of each of the forms included in this section.

SD-1.1 New York State Education Department Enrollment Data - The State Education Department's occupational education enrollment requirements for secondary, post-secondary and adult programs.

SD-1.2 Student Demand Information - This form seeks basic student demand information that can be used to compare courses.

SD-1.3 Suggestions for Reviewing Student Demand - This form contains a list of items that might be considered when the student demand for a particular program is being reviewed.

Job Outline Instructions

1.0 Review Worksheets SD-1.1 through SD-1.3 for student demand data suggestions.
2.0 Examine the student demand data needs/requirements of your institution.
3.0 Investigate the student demand data needs of other similar institutions.
4.0 Integrate the information gathered above (1.0-3.0) into a set of student demand data requirements that will satisfy the needs of your institution.
    4.1 As the data requirements are developed, be cognizant of the processes necessary to collect the data.

The following are the types of data currently required by the New York State Education Department through its Occupational Education Reporting System (OERS). For more information on the State Education Department requirements and forms contact Michael Kozma, State Education Department, 99 Washington Avenue, Albany, New York 12230 - Telephone (518) 474-1081.

1.0 Secondary: Program code; Program titles; the number of males, females, disadvantaged and handicapped for each regular and cooperative program; the number of ninth grade students; and, the number of nonpublic students.

2.0 Post-Secondary: Discipline Specialty; HEGIS code; the number of men and women that are enrolled as full-time and part-time freshman and sophomores; and the total number of students enrolled.

3.0 Adult: Program Code; Program Title; the number of males and females in Preparatory, Supplemental and Apprenticeship Programs; and, the number of handicapped and disadvantaged enrolled.

Student Demand Information

Worksheet SD-1.2

Instructions: Complete the items in this form for each course of instruction.

					Number of Students by Ethnic Type			
Program Code	Course Title	Total No. of Students enrolled	Percent of Capacity	Dropout rate	Am. Ind./ Alaskan	Black	Asian or Pacific As.	White

Suggestions for Reviewing Student Demand Worksheet SD-1.3

Instructions:

This worksheet contains a list of items that the user may want to consider in reviewing the student demand for a particular program. Each of the items suggested is related to student demand and may provide an institution with worthwhile feedback on a program.

The suggestions include the following:

1. Compare the number of courses and sections offered to the number that actually run.
2. Compute the student/teacher ratio by course or program and compare it to other courses or programs or to itself over time (i.e. previous year's ratios).
3. Compute the dropout rate per course or program.
4. Identify the average number of students per course per program.
5. Compare the number of students requesting a course to the number that actually enroll and complete the course.
6. Identify the male/female mix per course per program.
7. Identify the ethnic mix per course per program.
8. Identify the disadvantaged and handicapped per course per program.
9. Identify whether students enrolled in a particular course are program majors or non-majors.
10. Identify recruitment procedures used to bolster student demand per course.
11. Identify excess demands.
12. For new students identify the institutions which they attended before entering this course.
13. Identify local institutions that have programs that can feed into your occupational course or program.
14. Identify the percent of capacity that a particular course or program maintains.

Student Performance

Rationale:

Student performance is the foundation upon which most program evaluations have traditionally rested. Items that are generally considered by the criterion of student performance include placement, the percentage of students that pass, the average number of competencies learned, the level of absenteeism, the number of dropouts, the grade distributions, the level of truancy, the average daily attendance, etc.

Placement statistics have certainly dominated the occupational education program review process and as a result most placement and follow-up programs are well organized and the positive statistics are well disseminated. However, there are many more variables that should be reviewed when the effectiveness of occupational education is being considered. As indicated earlier, the purpose of this evaluation model is to give the user a process to look beyond student placement and demand as evaluative criteria and address other variables in the review process. Placement should not be deleted as a criterion, but be put into perspective. To that end, this packet will concentrate on the measurement of student performance (with emphasis on placement) and try to integrate these statistics into the framework suggested throughout the entire evaluation model.

The State Education Department already requires follow-up information on program graduates. Unless the program objectives identify that additional types of information are necessary, the State Education Department follow-up requirements should provide the information necessary to evaluate student placement for each program. If other types of student performance are reviewed (absenteeism, number of competencies learned, etc.) the user should make accommodations to measure those topics when the program objectives are written. Some sample program objectives for student performance include the following:

- That 60% of the XYZ Program graduates available for placement will secure employment within six months of completing the program in an occupation directly related to their area of study.
- That less than 10% of those completing Program XYZ and available for employment will be unemployed six months after they have completed the program.
- That there will be a 50% increase in the number of students graduating from Program XYZ placed in occupations that are non-traditional with respect to their sex.
- That within six months of graduation the response rate from follow-up surveys for Program XYZ graduates will be 99%.
- That the average annual absentee rate per student will decrease by 20% for the students in Program XYZ.
- That 90% of the students completing Program XYZ will attain proficiency (as measured by teacher evaluations) in 85% of the competencies identified in the course objectives or proficiency profiles.
- That within one year of graduation 85% of the graduates from Program XYZ will take the licensing exam and pass it.

SUBJECT: Student Performance

RESPONSIBILITY	ACTION
Program administrators and instructors.	1.0 Identify the program objectives that relate to student performance. 1.1 If program objectives have not been developed or are incomplete, refer to the program objectives packet. 2.0 Determine the types of information to be collected. 2.1 Review the objectives identified in 1.0 and list the types of data that will be necessary to make the analysis. Familiarity with the forms presented in Job Outline SP-1 will be helpful. 3.0 Develop, adopt or adapt the survey instrument(s) that can be used to gather the data to measure the above identified objective(s). 3.1 For sample surveys see Job Outline SP-1.
Vocational counselors, placement coordinators	4.0 Administer the survey instrument. 4.1 Determine how the instrument will be administered (mail, phone, personal interview). 4.2 From student records gather the following information - name, address, telephone number, sex, race, occupational program completed, and whether or not the student is disadvantaged, handicapped or has limited English speaking ability (most of this information is requested by the State Education Department on student completers or leavers). 4.3 Determine who will be involved in the administration of the survey (placement coordinators, counselors, administrators, teachers) and what the responsibilities of each will be. 5.0 Tabulate the survey results. 5.1 The process for tabulating the survey's results should be considered when the instrument is being developed.
Program administrators and instructors	6.0 Compare the results with the above identified program objectives. 6.1 Refer to the objectives identified in 1.0.
Vocational counselors, placement coordinators, program administrators and instructors.	7.0 Prepare and submit a report. 7.1 Identify the success/failure rate with the identified objectives. Reasons for success or failure should also be included in this section.

7.2 Make recommendations for future objectives.
7.3 Make recommendations for improved data collection methodologies.
7.4 Prepare a follow-up report that can be distributed to constituents.

Purpose:

This section provides the user with some forms that can be used to solicit information from program completers. The forms or surveys focus on placement-related items. If information is desired from graduates on other aspects of the program see the student satisfaction packet.

Follow-up surveys are generally administered through the mails, although some institutions have found it expedient to survey graduates over the telephone. Many institutions also engage teachers in the follow-up survey process, particularly when students do not respond to the initial contact attempts by the institution. Each institution must experiment to determine the process that yields for them the information that they need from a high percentage of those surveyed.

Below is a brief summary of each of the forms included in this section.

SP-1.1	New York State Education Department Follow-Up Survey - This is the latest draft of the form to be used by the State Education Department. It requests some general background information, some employment related information, and some information related to program satisfaction.
SP-1.2	Developing Follow-Up Survey Items - This form offers survey items for several of the follow-up questions that are commonly asked.
SP-1.3	Example Student Follow-Up Survey - Business Education - In addition to general follow-up questions, this survey includes items that provide feedback on the adequacy of the skills taught in a specific occupational program. Business education is the sample program used.

Job Outline Instructions

1.0 Determine the specific data requirements necessary to measure the program objectives related to student performance.
    1.1 Review the student performance program objectives.
2.0 Adopt, adapt or design an instrument which satisfies the above identified data requirements.
    2.1 Review SP-1.1 through SP-1.3.
    2.2 Select a format which is compatible with institutional procedures, that is not prohibitive with respect to tabulation and that will not frustrate, confuse or overburden the respondent.
3.0 Pilot the agreed upon instrument.

71

New York State Education Department Follow-Up Survey

Worksheet SP-1.1

Name ______________________________

Address ______________________________

Phone ______________________________

Married Name ______________________________

Graduated ______________________________

Program ______________________________

Date ______________________________

ID Number ______________________________

Instructions

Please complete this questionnaire. This information will enable us to improve our programs and services for you and future students.

USING A PENCIL, blacken in the circle next to your answer. Erase any errors completely. Please DO NOT use ballpoint pen.

Please be assured that your answers will be kept strictly confidential. In no way will you be individually identified.

1. GENERAL

Your present status is:

○ EMPLOYED (also fill in areas 2 & 4)
○ FURTHERING EDUCATION (also fill in 3)
○ MILITARY DUTY (also fill in 5)
○ UNEMPLOYED (also fill in 6)

Your status when you entered the occupational program:

○ HIGH SCHOOL STUDENT
○ TRANSFERRED FROM ANOTHER PROGRAM
○ RECENT HIGH SCHOOL GRADUATE
○ RECENTLY COMPLETED MILITARY DUTY
○ HAD BEEN WORKING AWHILE

Rate these statements on a scale of 1 to 4 as follows:
1=Strongly agree, 2=Agree, 3=Disagree, 4=Strongly disagree.

The placement office was helpful in:

① ② ③ ④ PREPARING APPLICATIONS/RESUMES
① ② ③ ④ PREPARING FOR INTERVIEWS
① ② ③ ④ SCHEDULING INTERVIEWS
① ② ③ ④ PERSONAL CAREER COUNSELING
① ② ③ ④ GETTING LEADS FOR JOBS

You enrolled to prepare for a specific job or career.

- ○ STRONGLY AGREE
- ○ AGREE
- ○ DISAGREE
- ○ STRONGLY DISAGREE

2. EMPLOYED

Do you consider your present job to be

- ○ PERMANENT
- ○ TEMPORARY

How does your job relate to the occupational education program in which you were enrolled?

- ○ DIRECTLY RELATED
- ○ SOMEWHAT RELATED
- ○ UNRELATED

The occupational education program in which you were enrolled prepared you for this job.

- ○ STRONGLY AGREE
- ○ AGREE
- ○ DISAGREE
- ○ STRONGLY DISAGREE

How many hours a week do you work?

- ○ UNDER 20
- ○ 20 - 29
- ○ 30 - 39
- ○ 40 AND UP

Were you working while you were enrolled in the occupational education program?

○ YES ○ NO

If yes, do you still work in the same job?

○ YES ○ NO

How much do you earn per week?

- ○ UNDER $50
- ○ 50 - 74
- ○ 75 - 99
- ○ 100 - 124
- ○ 125 - 149
- ○ 150 - 174
- ○ 175 - 199
- ○ 200 - 224
- ○ 225-250
- ○ OVER 250

Rate these employment conditions:
1 = Very satisfied, 2 = Somewhat satisfied,
3 = Somewhat dissatisfied, 4 = Dissatisfied.

① ② ③ ④ CHANCES FOR ADVANCEMENT
① ② ③ ④ SALARY
① ② ③ ④ WORKING CONDITIONS

How did you find your present job?

○ FAMILY OR FRIEND
○ PLACEMENT/COUNSELING OFFICE
○ NYS EMPLOYMENT SERVICE
○ PRIVATE EMPLOYMENT AGENCY
○ SCHOOL INSTRUCTOR
○ NEWSPAPER/PERIODICAL
○ RADIO/TELEVISION
○ APPLIED DIRECTLY TO EMPLOYER

Sometime in the near future do you plan to enroll in an educational program for advanced training in your employment area?

○ YES
○ NO
○ UNDECIDED

Year and month in which you were hired.

○ 1980
○ 1979
○ 1978
○ PRIOR

○ JAN.
○ FEB.
○ MAR.
○ APR.

○ MAY
○ JUNE
○ JULY
○ AUG

○ SEPT.
○ OCT.
○ NOV.
○ DEC.

3. EDUCATION

In what type program are you enrolled?

○ BACHELOR'S DEGREE
○ ASSOCIATE DEGREE
○ HS DIPLOMA/CERTIFICATE
○ CERTIFICATE (2 YEAR COLLEGE)
○ APPRENTICESHIP
○ OTHER

○ PART TIME ○ FULL TIME

NAME & LOCATION OF EDUCATIONAL INSTITUTE ____________________
YOUR MAJOR FIELD OF STUDY ____________________

4. EMPLOYED

EMPLOYER'S NAME ____________________
ADDRESS ____________________
SUPERVISOR'S NAME ____________________
YOUR JOB TITLE & JOB DESCRIPTION ____________________

5. MILITARY

○ ARMY ○ AIR FORCE ○ COAST GUARD

○ NAVY ○ MARINES ○ MERCHANT MARINES

How does your present assignment relate to your occupational education program?

○ DIRECTLY RELATED
○ SOMEWHAT RELATED
○ UNRELATED

6. UNEMPLOYED

○ FAMILY RESPONSIBILITIES
○ ILLNESS/DISABILITY
○ TEMPORARY LAYOFF
○ RETIRED
○ SEEKING EMPLOYMENT

Would you like assistance from the placement counseling office?

○ YES ○ NO

Developing Follow-Up Survey Items*

Worksheet SP-1.2

1. If you want to know how many students are employed, you can ask:

What is your current employment status?
(check those that apply)

A. ____ Employed full-time (35 hours or more per week)

B. ____ Employed part-time (less than 35 hours per week)

C. ____ Armed Forces ______________
Branch

D. ____ Unemployed

E. ____ Pursuing further education

F. ____ Unavailable for employment
(1) ____ Illness
(2) ____ Housewife
(3) ____ Other ______________

2. If you want to know how many students are employed in related and un-related positions, you can ask:

If you are presently employed, indicate the relationship of your job to the occupational training received while in school. I am employed in an occupation:

A. ____ for which I received training.

B. ____ which is related to my training.

C. ____ which is not related to my training.

3. If you want to know what their present salary is, you can ask:

A. If you are presently employed, please check to indicate your appropriate hourly wage range.

(1) ____ Less than $2.90 per hour
(2) ____ $2.90 - $3.99 per hour
(3) ____ $4.00 - $4.99 per hour
(4) ____ $5.00 - $5.99 per hour
(5) ____ More than $6.00 per hour

B. If you are presently employed, what is your annual salary range?

(1) ____ Less than $5,000
(2) ____ $5,001 - $7,000
(3) ____ $7,001 - $9,000
(4) ____ $9,001 - $11,000
(5) ____ $11,001 - $13,000
(6) ____ $13,001 - $15,000
(7) ____ Over $15,000

4. If you want to know who their present employer is, you can ask:

Please indicate below your present employer's name, address, etc.

A. Employer's Name ____________________

B. Employer's Address ________________

____
(Town, City) (State) (Zip)

C. Immediate Supervisor's Name ________

____

D. Supervisor's Job Title _____________

____

5. If you want to know what their evaluation of the courses taken at (Name of School) is, you can ask:

A. Which courses taken at (Name of School) have been of most benefit to you on the job?

B. Which courses taken at (Name of School) have been of least benefit to you on the job?

C. To what extent did the training you received at (Name of School) help you with what you are presently doing?

(1) ____ A great deal
(2) ____ Some
(3) ____ Very little
(4) ____ Did not help at all
(5) ____ Uncertain

6. If you want to know their evaluation of the school's training program, you can ask:

> Indicate the adequacy of the training you received from the school in the following competencies:

Competency Area	Adequacy of Training			N/A
	More Than Adequate	Adequate	Inadequate	
A.				
B.				
C.				
D.				

7. If you want to know what further education they may be pursuing, you can ask:

> Have you taken any further education or training since high school? ____ YES ____ NO
>
> If yes to above, check which type:

A. College (name) ______________________
 ____ full-time ____ part-time
 ____ public ____ private

B. ____ Adult Evening School

C. ____ Art School

D. ____ Business School

E. ____ Nursing School

F. ____ Technical School

G. ____ Trade School

H. ____ Cosmetology School

I. ____ Other (specify) ____________________

*Adapted from "Planning, Implementing and Evaluating Career Preparation Programs" by Davis and Borgen.

Example Student Follow-Up Survey - Business Education* Worksheet SP-1.3

____
Student ID Number

Name ______________________________ Telephone A/C __________

Current Address ____

____
(Town) (State) (Zip Code)

Permanent Address ____

____
(Town) (State) (Zip Code)

EMPLOYMENT ITEMS

1. What is your present employment status? (Check all that apply.)
   - A. ____ Employed full-time (more than 35 hours per week)
   - B. ____ Employed part-time (less than 35 hours per week)
   - C. ____ Enrolled as a full-time student in college
   - D. ____ Enrolled as a part-time student in college
   - E. ____ In the Armed Services
   - F. ____ Unemployed (if unemployed, check why)
     - (1) ____ Homemaker
     - (2) ____ Illness
     - (3) ____ Other ____________________
2. What is the name and address of your present employer?
   - A. Name of Firm ______________________________
   - B. Address ______________________________

     ____
     (Town) (State) (Zip Code)
   - C. Name of your immediate supervisor ____________________
   - D. Supervisor's title ______________________________
3. What is your job title? ______________________________
4. How related is your job to the training received at school?
   - A. ____ Identical
   - B. ____ Related
   - C. ____ Unrelated

Example Student Follow-Up Survey - Business Education

Worksheet SP-1.3
(Page 2)

5. Please indicate your present salary range:

Hourly	Weekly	Monthly
___ Less than $2.00	___ Less than $75.00	___ Less than $300.00
___ $2.00 to $2.50	___ $75.00 to $100.00	___ $300.00 to $350.00
___ $2.51 to $3.00	___ $100.01 to $125.00	___ $350.01 to $400.00
___ Over $3.00	___ Over $125.00	___ Over $400.00

6. If you are presently or have been previously employed in office work, indicate the adequacy of the training you received in the ________ High School Secretarial Program for the following skills:

	Does Not Apply	More Than Adequate Training	Adequate Training	Training Was Fair	Training Was Inadequate
Shorthand Dictation Speed	___	___	___	___	___
Shorthand Accuracy	___	___	___	___	___
Typing Speed	___	___	___	___	___
Typing Accuracy	___	___	___	___	___
Transcribing from Shorthand	___	___	___	___	___
Transcribing from Recorded Letters	___	___	___	___	___
Typing Tables	___	___	___	___	___
Typing from Rough Draft	___	___	___	___	___
Operating Machines and Equipment	___	___	___	___	___
Filing	___	___	___	___	___

	Does Not Apply	More Than Adequate Training	Adequate Training	Training Was Fair	Training Was Inadequate
Spelling	___	___	___	___	___
Vocabulary	___	___	___	___	___
Punctuation	___	___	___	___	___
Capitalization	___	___	___	___	___
Grammar	___	___	___	___	___

Composing Letters	___	___	___	___	___
Sentence Structure	___	___	___	___	___
Greeting Callers	___	___	___	___	___
Telephone	___	___	___	___	___
Other Skills:	___	___	___	___	___
___________	___	___	___	___	___
___________	___	___	___	___	___
___________	___	___	___	___	___
___________	___	___	___	___	___
___________	___	___	___	___	___

7. List other skills which you feel should have been taught in the ______________ High School Secretarial Program.

____

____

8. Skills for office practice - Evaluate the school training received for performing each of the following:

	Excellent	Good	Adequate	Less Than Adequate	Poor
Letters Placement on page					
Use of stationery & carbon paper					
Composing					
Typing Speed development					
Business forms					

Tabulation					
Business reports					
Financial statements					
Legal forms					
Telegrams					
Interoffice memorandums					
Shorthand Speed development					
Mailable letters					
Business English Grammar					
Punctuation & capitalization					
Field trips Moorman's					
Fisher's					
Office Procedure Mail services					
Incoming mail					

Example Student Follow-Up Survey - Business Education

Worksheet SP-1.3
(Page 5)

Outgoing mail					
Telephone					
Receptionist duty					
Personal habits					
Filing Alphabetic filing					
Geographic filing					
Numeric filing					
Commercial filing systems					
Financial duties Petty cash					
Checkbook					
Cash payments & receipts					
Payroll					
Travel (itinerary)					

9. Please list additional items which are not listed above but which you feel are essential and should be included in the office practice class.

Example Student Follow-Up Survey - Business Education Worksheet SP-1.3
(Page 6)

EDUCATION ITEMS

10. If you are enrolled in a post-high school institution, what is your major?

Major ______________________________

Name of Institution ______________________________

11. If you went for additional training beyond high school, please check reason(s) why.

___ Felt high school training inadequate

___ Desire of parents

___ Changed occupational goals

___ Received scholarship

___ Other (please explain)

EVALUATION ITEMS

12. Please rate the courses in which you were enrolled while a student at ______________ High School according to the degree to which they helped you on your job.

	Excellent	Good	Fair	Poor	Of No Value
General Business	___	___	___	___	___
Business Machines	___	___	___	___	___
Business Law	___	___	___	___	___
Recordkeeping	___	___	___	___	___
Bookkeeping	___	___	___	___	___
Secretarial Office Practice	___	___	___	___	___

*Adapted from surveys by Quincy Senior High School and Centralia High School and others as presented in "Planning, Implementing and Evaluating Career Preparation Programs" by Davis and Borgen.

Student Satisfaction

Rationale:

Students who just completed or dropped out of an occupational education program can provide the user with valuable data concerning their reactions to the adequacy or inadequacy of a particular program. Students are the clients in the educational process and make daily observations that can produce a considerable amount of pertinent information for those involved in improving programming. As is the case with the other criteria presented in this model, if student feedback is to be solicited, it should be made clear that the opinions and comments received are not mandates for program change but rather one source of information in a comprehensive program evaluation network.

Many of the student evaluation forms reviewed for inclusion in this module focused upon an evaluation of the instructors' effectiveness. However, in this packet, evaluation of the program rather than of the instructor is the major concern. While some implications related to an instructor's performance may be a spin off of the data gathered from the suggested forms, it should be clear from the types of questions asked that the major focus is directed toward the total program.

Many of the items selected from the curriculum and facilities, equipment and supplies modules may also be used in this packet to gather the student's perception for those variables. Again the scope and depth of input sought from the students will be determined by the program objectives as identified for this criterion. The user is referred to the program objective packet for assistance in developing these objectives. The following is a list of sample objectives that may give you ideas for objectives that relate to student satisfaction;

- That upon completion of the XYZ Program, 65% of the students will rate the experience satisfying.
- That upon completion of XYZ Program, 70% of the students will indicate that they would take the same program again if they had to make the choice.
- That input from students will be solicited for each of seven different program variables.
- That 80% of the students who complete the XYZ Program will indicate that they received sufficient training in five different affective skills areas (e.g. reliability, good attitude, communication skills, customer relations, etc.).
- That information regarding specific reasons for program termination will be sought from each program dropout.
- That a process to solicit the input of students toward their program of instruction will be in place by the end of the school year.

SUBJECT: Student Satisfaction

RESPONSIBILITY

Program administrators and instructors

ACTION

1.0 Identify the program objectives that relate to student satisfaction.
  1.1 If program objectives have not been developed or are incomplete, refer to the program objectives packet.
  1.2 For additional information on the program objectives development review Worksheet SS-1.1 contained in this packet.
2.0 Determine the types of information to be collected.
  2.1 Review the objectives identified in 1.0 and list the types of data that will be necessary to make the analysis. Familiarity with the forms presented in Job Outline SS-1 will be helpful.
3.0 Develop, adopt or adapt the survey instrument(s) that can be used to gather the data to measure the above identified objective(s).
  3.1 For sample survey items and rating scale suggestions see Job Outline SS-1.
  3.2 Pilot the final draft of the selected survey items.
4.0 Administer the survey instrument.
  4.1 Determine who (teacher, administrator, counselor) will administer the survey and how and when it will be done.
5.0 Tabulate the survey results.
  5.1 The process for tabulating the survey's results should be considered when the instrument is being developed.
6.0 Compare the results with the above identified program objectives.
  6.1 Refer to the objectives identified in 1.0.
7.0 Prepare and submit a report.
  7.1 Identify the success/failure rate with the identified objectives. Reasons for the successes or failures should also be included in this section.
  7.2 Make recommendations for future objectives.
  7.3 Make recommendations for improved data collection methodologies.

Student Satisfaction

Job Outline SS-1

Purpose:

Obtaining a reading on student satisfaction quite obviously necessitates input from students - the educational clients. This model suggests that such input be collected via a survey form and that the survey be administered at the end of a student's involvement with that program. This section contains a series of survey forms that may be used to solicit student input. Your student satisfaction program objectives should be used to identify the types of data necessary for their measurement and from these data needs the specific survey items can be selected. Below is a brief summary of each form.

SS-1.1 Student Satisfaction Survey Topics - This form contains a laundry list of items that will give users several ideas for their student satisfaction survey form. It should be noted that program rather than instructor effectiveness provides the focus for these items.

SS-1.2 Sample Student Satisfaction Survey - This form addresses three general areas related to students' satisfaction and offers a method to quantify the results.

SS-1.3 Rating Scale Suggestions - This form identifies a few different scales that can be used to rate a program. Each option is a method through which a student's opinion can be quantified.

Job Outline Instructions

1.0 Determine the specific data requirements necessary to measure the program objectives related to student satisfaction.
    1.1 Review the student satisfaction program objectives.
2.0 Design an instrument which satisfies those data requirements.
    2.1 Review SS-1.1 through SS-1.3.
    2.2 Select a format which is compatible with institutional procedures, is not prohibitive with respect to tabulation and will not frustrate, confuse or overburden the respondent.
    2.3 Select content that satisfies data needs for the program and institutional requirements.
3.0 Pilot the agreed upon instrument.

Student Satisfaction Survey Topics

Introduction*

This worksheet includes a series of statements to which students could be asked to respond. The user is encouraged to select those items which supply the required data necessary to measure their program objectives which address student satisfaction. The items suggested here can be reworded to accommodate any of the rating scales presented in SS-1.3.

1. Students feel their preparation has been relevant to employment needs.
2. Students feel they can demonstrate their proficiency in performance tests based on program objectives.
3. Students feel they will return for education to upgrade their skills and technical knowledge.
4. Students feel they will refer potential students to the institution.
5. Students feel their total school achievement is favorably affected by their occupational education experience.
6. Students are aware of the schools continuing interest in them.
7. Students feel their progress is measured in terms of achievement of performance rather than on the basis of time in attendance.
8. Students feel properly oriented to their program, the entire school and the ancillary services available to them (e.g. student organizations, counseling services, placement services, work experience services, etc.).
9. Early in the program students understand the types of jobs associated with the training, the availability and beginning salaries of those jobs, and the working conditions, physical demands and hazards encountered by such employment.
10. Students feel they learned all they were capable of learning.
11. Students feel that the following affective skills were suitably taught/reinforced by their program: positive attitude towards work, good work habits, communication skills, ability to deal with others, ability to follow instructions, safety habits, attendance, leadership skills and self-esteem.

Student Satisfaction Survey Topics

Worksheet SS-1.1
(Page 2)

12. The students were satisfied with the evaluation process used.

13. Students were satisfied with the textbooks, teaching aids, and handouts provided them.

14. The performance objectives, the course outline and reference materials were made available to the students.

15. Students were aware of the performance expected of them, the conditions under which that performance would take place, the criteria by which the performance would be judged and the minimum acceptable level of performance.

16. Students feel that their special learning needs were accommodated.

17. Students feel that immediate feedback of test results and progress measures were the rule rather than the exception.

18. Students feel that they exhibit genuine pride in workmanship.

19. Students feel that they learned maintenance procedures and participated in an organized program of preventive maintenance.

20. Students feel the types of skills being taught accurately reflect the real world of work.

21. Students feel that they have received adequate information and training in job seeking skills (e.g. resume writing, interviewing techniques and placement services).

22. Students feel that student organizations taught leadership skills (or any other objective that the student organization may have).

23. Students feel that their work experience situation enhanced their occupational training.

24. Students feel that classrooms, laboratories and shops were adequate in size, location and arrangement.

25. Students feel that the equipment and supplies were adequate for the needs of the program.

*The items used in this worksheet were adapted from "Instruments and Procedures for the Evaluation of Vocational/Technical Education: Institutions and Programs" (Pilot Test Edition), National Study for the Accreditation of Vocational/Technical Education, Washington, D. C.: American Vocational Association, 1971.

Sample Student Satisfaction Survey

Worksheet SS-1.2

Introduction:*

This brief survey can be used to identify general student reactions to a program. It is suggested that the form be administered to the students near the end of their course of instruction. The teacher, a supervisor or a counselor can administer the form and tabulate its results.

Survey Instructions: Complete each item using the 5-point rating scale. Circle the number that most closely reflects your opinion.

1. My experience in program XYZ was

   very satisfying 1 2 3 4 5 not at all satisfying

2. If I could choose an occupational course over again I would:

   choose the same course 1 2 3 4 5 not choose the same course

3. My occupational or educational plans for the future are to:

   enter my area of specialization 1 2 3 4 5 not enter my area of specialization

Tabulation:

To determine if the response to each item was positive or negative:

1. For each item total the number of times each option was circled.

   (e.g. for item #1 in a class of 24 students, 9 may have circled option #1; 7, #2; 4, #3; 3, #4 and 1, #5)

2. For each item tabulate the number of positive, negative and neutral responses. Options 1 and 2 are considered positive, option 3 neutral and options 4 and 5 negative.

   (e.g. using the data above there are 16 positive responses, 4 neutral and 4 negative)

3. Translate the positive, negative and neutral results to percentages.

   e.g. $\frac{16}{24}$ = 66 2/3% positive

   $\frac{4}{24}$ = 16 2/3% neutral

   $\frac{4}{24}$ = 16 2/3% negative

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*The items used in this worksheet were adapted from "Evaluation Hints for Vocational Teachers" by Albert J. Pautler, Jr., American Technical Society, Chicago, Illinois.

Rating Scale Suggestions

Worksheet SS-1.3

Introduction

The purpose of this worksheet is to provide users with a few rating scales through which student opinions may be registered. Any of the survey items suggested in this module may be converted to the scales identified in this worksheet.

1) Descriptive Scales - Students check the response that they feel is most descriptive of the program variable.

Example: Students feel that the career preparation provided by XYZ course

____ thoroughly prepares them for employment in a related field

____ for the most part prepares them for employment in a related field

____ does not prepare them for employment

____ prepares them for employment, but not in a related field

2) Numerical Scales - Students rate the statement on a continuum.

See SS-1.2 for an example.

3) Graphic Scales - Students rate the statement on a continuum; however the continuum is represented by a line (sometimes broken into segments) whose ends represent contrasting extremes. If segments are used, they may be accompanied by a brief verbal description.

Example: Students feel that the career preparation provided by XYZ Course

thoroughly prepared /___/___/___/___/___/___/___/ did not prepare

them for employment in a related field.

4) Student Opinionaires - The student opinionaire is a type of scale; however it also evokes many free responses. Even though this is difficult to summarize due to the free responses, it does have some merits.

Example: What was the most important purpose for taking this course?

____

____

How well was this purpose met?

Excellently	Very Well	Fairly Well	Poorly	Very Poorly

Cost-Benefit Analysis

Rationale:

As with other evaluation techniques the purpose of a cost-benefit analysis is to equip program planners/decision-makers with a tool or method through which the quality of programs can be compared. A cost-benefit study is quantitative in nature and provides the user with a unit of compatability (unit of measure) through which programs can be rated. The process outlined here will concentrate on cost-benefit analysis (the ratio of the costs of a program to their quantitative benefits) as opposed to a cost-effectiveness analysis (the ratio of cost to the translation of qualitative benefits). The "costing out" process used in this packet relies heavily on the work of a similar study completed by Dr. Austin Swanson of the Educational Administration Department at SUNYAB (1974). The benefits side of the equation is limited to a determination of the average weighted entry level wages.

The users are reminded that much valuable information can be derived by calculating only the cost section of this packet; for example, detailed per program expenditures can readily yield the data on cost per enrolled student, cost per graduate and cost per placement as well as identify the specific expenditure categories that cause programs to deviate from previous expenditure levels. Such information is not only useful in the program decision-making process, but also in providing concise data to those publics who hold programs accountable.

The user is reminded that cost-benefit analysis is only one tool in the total process of program evaluation. Other evaluation elements or criteria are to be included in program decision-making. Consistent with the other evaluation techniques the outcome of a cost-benefit analysis should be related to the program goals and objectives previously set. Examples of program objectives which relate to cost-benefit analysis include:

- That the cost of Program XYZ per student will remain below $1500.
- That the cost per placement for Program XYZ will be less than $2000.
- That the cost of Program XYZ will not increase more than seven percent over last year's cost.
- That the individual Program XYZ expenditures for equipment and supplies will not exceed twenty percent of its costs.
- That within one year of graduation from Program XYZ the average salary of those placed will be greater than the average entry level salary for occupations related to the program.

SUBJECT: Cost-Benefit Program Evaluation

RESPONSIBILITY

Program administrators and instructors.

ACTION

1.0 Identify the program objectives that relate to cost-benefit analysis.
  1.1 If program objectives have not been developed or are incomplete, see the objectives development packet.
  1.2 Identify and list the objectives that address themselves to cost-benefit analysis.
2.0 Determine the types of information to be collected.
  2.1 Review the program objectives identified in 1.0 and list all of the data types that will be necessary to make the analysis. Familiarity with the methodologies given in 3.0 will be useful.
3.0 Select and implement the necessary data gathering methodologies.
  3.1 Determine facilities expenditures.
    3.1.1 See Job Outline C/B-1.
  3.2 Determine instructional expenditures.
    3.2.1 See Job Outline C/B-2.
  3.3 Determine equipment/fixture expenditures.
    3.3.1 See Job Outline C/B-3.
  3.4 Determine supply expenditures.
    3.4.1 See Job Outline C/B-4.
  3.5 Determine operation and maintenance expenditures.
    3.5.1 See Job Outline C/B-5.
  3.6 Determine general support services expenditures.
    3.6.1 See Job Outline C/B-6.
  3.7 Determine benefits.
    3.7.1 See Job Outline C/B-8.
4.0 Compile and tabulate the results.
  4.1 See Job Outline C/B-7.
5.0 Compare the results to the above identified goals and objectives.
  5.1 Refer to list identified in 1.0.
6.0 Prepare and submit report.
  6.1 Success rate with goals and objectives.
  6.2 Recommendations for future goals and objectives.
  6.3 Improvements in data collection.
  6.4 Improvements in methodology.

Facilities Expenditure

Job Outline C/B-1

Purpose:

The purpose of this worksheet is to determine the cost of the space needs for each occupational program. Building space costs include unimproved space and taxes. It does not include equipment, fixtures, operation, maintenance, utility or supply costs.

The following are instructions for completion of Worksheet C/B-1.1:

1. Determine the total cost of each building's unimproved space. This would include the annual rental and/or building debt service (mortgage) charges and the taxes. All of these figures should be available at the institution's business office.

2. Determine and list the square footage for the entire building and divide this figure into the total cost developed in Step 1 to arrive at a cost per square foot rate.

3. Determine and list the amount of space (in square feet) used by each occupational program. Shared space should be assessed according to percent of use (e.g., a 600 square foot classroom used four hours per day by Distributive Education and two hours per day for Data Processing will result in 400 square feet assessed to Distributive Education and 200 square feet to Data Processing.

   The dimensions of the space used by each program can be obtained from the building blueprints which should be on file in the business office.

4. Multiply the cost per square foot by the number of square feet and enter results on C/B-1 and C/B-7. Note that the cost of general space (halls, administrative, lavatories, etc.) will be picked up in C/B-6.

5. Repeat process for each occupational education building.

Facilities Expenditure Worksheet Worksheet C/B-1.1

School Year ________

________ Total annual cost of building (unimproved space and taxes)

________ Total square footage for building

________ Cost per square foot of building space

Occupational Program	Number of square feet	Cost for space

Instructional Expenditure

Job Outline C/B-2

Purpose:

The purpose of this worksheet is to determine the annual instructional personnel costs by program. The salary and fringe benefits of classroom teachers, aides and assistants are included in this section. Administrators and ancillary personnel (counselors, placement coordinators, etc.) are treated in another section (General Services - C/B-6).

Since there is little evidence indicating that teaching experience and educational preparation (determinates of teacher salaries) lead to increased learning in the students, the average or mean teacher (aide and assistant) salaries will be used to represent program costs.

The following are instructions for completion of Worksheet C/B-2.1:

1. Determine the mean salary for a full time equivalent instructor at your occupational center. This figure should be available at the business office.

2. Determine the mean salary for a full time equivalent teacher aide. This figure should be available at the business office.

3. Determine the mean salary for a full time equivalent teacher assistant. This figure should also be available at the business office.

4. Determine the amount paid in fringe benefits for the average teacher, aide and assistant. Combine this amount with the salary levels for these positions.

5. Identify and list the number of full time equivalent (FTE) teachers, aides, and assistants by program.

6. For each program multiply the number of personnel types by their respective average annual cost and represent the sum in the Total Program Instructional Personnel Costs Column.

Instructional Personnel Annual Expenditure Worksheet Worksheet C/B-2.1

School Year ________

Personnel Type	Annual Mean Salary	Annual Mean Fringe	Mean Annual Cost
Teacher Aide Assistant			

Program	Teacher Cost		Aide Cost		Assistant Cost		Total Program Instructional Personnel Costs
	#FTE	Cost	#FTE	Cost	#FTE	Cost	

Equipment/Fixture Expenditure

Purpose:

The purpose of this worksheet is to determine the annual cost of program equipment and fixtures which have a useful life expectancy much longer than one year. Fixtures refer to that program equipment which is fixed or fastened in a program area, whereas "equipment" refers to that program equipment which is mobile. A distinction is made between fixed and mobile program equipment because the useful life expectancy between the two is generally different.

The following are instructions for completion of Worksheet C/B-3.1:

1. Identify and list each piece of equipment/fixture by program. The business office and/or program instructors should have such an inventory.
2. Determine and list the inventory value or current replacement cost for each piece of equipment/fixture listed.
3. To determine the annual cost of each piece of equipment/fixture use the following formula

$$A = \frac{Ri}{1 - \frac{1}{(1+i)^n}}$$

where: A = annual cost

R = current replacement rate

i = annual rate of interest

n = life expectancy in years of the equipment or fixtures

The annual interest rate refers to that interest rate which school districts must pay. In New York State the average interest rate for school districts for 1979 was in the range of 8 to 9%. An industrial appraisal firm has set the expected useful life for equipment at seven years and for fixtures at ten years. The life expectancy of your equipment/fixtures may vary due to the limited use they receive.

Example computation:

$$A = \frac{Ri}{1 - \frac{1}{(1+i)^n}}$$

$$A = \frac{2000 \cdot .08}{1 - \frac{1}{(1+.08)^7}} = \frac{160}{1 - \frac{1}{1.08^7}}$$

$$= \frac{160}{1 - \frac{1}{1.71}} = \frac{160}{1 - .58} = \frac{160}{.42} = \$380.95$$

where: R (replacement rate) = $2000

i (annual rate of interest) = 8%

n (life expectancy) = 7 years

Repetitions of this formula can be completed quickly if i the annual interest rate and n the life expectancy are held fairly constant.

4. An Equipment/Fixture Cost Worksheet should be completed for each program and the total equipment/fixture annual cost by program should be transferred to C/B-7.

Equipment/Fixture Expenditure Worksheet Worksheet C/B-3.1

School Year ________

Program ________

Names/types of equipment	Replacement Cost	Life Expectancy in years	Annual Cost

Purpose:

The purpose of this worksheet is to determine the annual expenditures of occupational supplies by program. These expenditures include costs for the supplies, textbooks, certain contracted services (directly related to a program) and other costs identified specifically to a program.

The following are instructions for completion of Worksheet C/B-4.1:

1. List the annual expenditures by program for supplies, textbooks, certain contracted services and other costs. Hopefully the business office will have such expenditures itemized by program. If not, a building supervisor or program instructor may have the amounts expended for this category. This program cost should also be entered on form C/B-7.

Supplies-Expenditure Worksheet

School Year __________

Occupational Program	Annual Supplies Cost

Operation and Maintenance Expenditure

Purpose:

The purpose of this worksheet is to determine the annual programs expenditures for operation and maintenance. To estimate these costs the actual expenditures will be prorated to each program according to the ratio of area assigned to a program. Operation and maintenance expenditures include custodial salaries and fringe benefits, utilities, insurance, certain contracted services, supplies and other expenses. Aggregated costs will be available at the business office.

The following are instructions for completion of Worksheet C/B-5.1:

1. Identify the annual building operation and maintenance costs.
2. Using the data included in C/B-1, list the ratio of area utilized by each program to the total area. These figures can be calculated by dividing the square footage assigned to each program by the total area (building) square footage. Note that the sum of the ratios will not equal one because part of the total area includes common or general space.
3. Multiply the ratio for each program by the total annual building operation and maintenance expenditure to arrive at an annual operation and maintenance estimate for each program.

Operation and Maintenance Program Expenditure Worksheet

Worksheet C/B-5.1

School Year ________

________________ Total Annual Operation and Maintenance Expenditure

Program	Ratio of Program Area to Total Building	Operation and Maintenance Expenditure per Program

General Support Services Expenditure

Purpose:

The purpose of this worksheet is to determine the annual program expenditures incurred through the general support services of an occupational program. Such costs include expenditures for administrative, clerical and supportive teachers salaries and fringe benefits, office supplies and equipment, space allotted to general services, operation and maintenance of that space and student transportation. Business office records should have the information needed to complete this worksheet.

The following are instructions for the completion of Worksheet C/B-6.1:

1. List the number of students enrolled in the total occupational program and in each program.

2. Determine and list the ratio of students in each program to the whole student body (divide the number of students in each program by the total number in the entire occupational program).

3. Determine the total costs for salaries and fringe benefits of administrators, clerics and supportive teachers/staff (counselors, placement and work study coordinators, remedial teachers, assistants and aides) that service the occupational program. Place this figure in the Total row of the Personnel Expenditures column. Multiply this total cost by the program ratio for students to arrive at a personnel general support expenditure by program.

4. Determine the total amount expended by General Support Services for supplies and equipment in the same fashion that was used to determine these costs for each program (C/B-3 and C/B-4). Multiply this total figure by the student ratio for each program to determine the supply and equipment general support service expenditure per program.

5. Consistent with the procedures outlined in C/B-1 determine the amount of space allocated to general support services space to the total amount of space. Multiply this general support ratio by the total annual building cost identified on C/B-1 to obtain the annual general support total cost. The corresponding program costs are derived by multiplying this figure by the program student ratios.

6. From C/B-5 take the total building operation and maintenance expenditure and multiply it by the General Support Services space ratio developed in item 5. This product will be the total general support services expenditure for operation and maintenance and can be broken down by program by multiplying it by the program student ratios.

7. Student transportation costs can be broken down by program also by multiplying the total student transportation costs by the program student ratios. However the total transportation cost may be a little difficult to identify. At the secondary BOCES level, the component school districts pay for their occupational

student transportation. In this case, each component school must be polled to determine their cost for transporting students to and from the occupational centers. These individual component expenditures must then be aggregated to arrive at the total student expenditure. In the case of city districts that provide their own occupational training the occupational student transportation costs should be available through the business office.

At the post-secondary level, most students provide their own transportation and unless these institutions provide shuttle service or something similar the cost to transport students will be insignificant.

8. Add the rows across to arrive at the annual general support services expenses by program. Enter these program expenditures on C/B-7.

General Support Services Expenditure Worksheet Worksheet C/B-6.1

School Year __________

Program	Number of Students	Ratio of Students	Personnel Expenditure	Supplies & Equipment	Space	Other	Stud. Tran.	Total

106

Expenditure Summary

Purpose:

The purpose of this section is to provide a structure that may be used to summarize the expenditures that relate to each occupational program.

The following are the instructions for the completion of Worksheet C/B-7-1 - Occupational Program Expenditure Summary Sheet.

1.0 Use the results of worksheets contained in C/B-1 through C/B-6 to fill in the program expenditures requested in columns two through six.
2.0 Total the expenditures by program in Column seven.
3.0 Transfer the number of students by program from C/B-6.1.
4.0 Divide the total expenditure per program by the respective number of students to determine the cost per program per student.

Occupational Program Expenditure Summary Sheet Worksheet C/B-7.1

School Year ________

Program	Facilities	Instructional Personnel	Supplies	Equipment & Fixtures	Operation & Maint.	General Support	Total	Number of Students	Cost per Student

Purpose:

In the first seven sections of this module, a fairly comprehensive set of procedures to determine program costs has been laid out. Fortunately, much of the data is already available and after the process is worked through once, it should boil down to a set of routine calculations. Determining all of the benefits that accrue from occupational programs, on the other hand, involves some fairly complex activities and as such is thought to be beyond the scope of this model. However, this section does attempt to get at one aspect of the benefits of occupational programs. Data exists in the Department of Labor that identifies the entry level wages paid for most of the jobs for which occupational programs train. By developing a weighted average for these entry level salaries by program, users can identify the potential wages that can be expected by those who successfully complete the occupational education program. These potential wages can be compared with program costs and the actual wages of program completers as identified by the follow-up study, can be used as a favorable statistic in the recruitment process and as one piece of information useful in making decisions about new programs.

The following is a summary of the worksheets presented in this section:

C/B-8.1	Sample Letter - This form contains a sample letter that can be sent to the Department of Labor to obtain data relevant to the weighted entry level wage calculations.
C/B-8.2	Average Weighted Entry Level Wage Formula - This worksheet presents a formula (with an example) that may be used to calculate the weighted entry level wage that can be expected by the graduates of each occupational program.

The activities necessary to determine the expected entry level wage benefit include:

1.0 For each program identify the jobs for which students are trained.
    1.1 Review the jobs that post graduates have received.
    1.2 Review the curriculum to see the types of jobs toward which the training is directed.
    1.3 Check with consultant committee members.
2.0 Obtain the entry level wages for each occupation and their relative weight or demand with respect to the other occupations listed in the occupational education program area.
    2.1 Contact the local Department of Labor Economist (in Region XII it is George Smyntek, 200 Franklin Street, Buffalo, New York 14202, Phone (716) 854-4242).
    2.2 See sample letter presented in C/B-8.1.
3.0 Compute the average weighted entry level wages for each program offered.
    3.1 See the formula presented in C/B-8.2.

Date

Dear Mr. DOL Economist:

I am trying to determine the potential wages in this area for students who complete occupational education programs at Institution XYZ. Attached is a list of the occupational education programs we offer together with a series of jobs that each program prepares students to enter. In order to determine a weighted average entry level wage for each program, would you supply the following data:

1. The current entry level wage for each of the occupations listed.
2. The number of openings registered in the past year for each occupation listed.

or

List the relative demand by occupational education program for each of the occupations listed with a program; e.g. there is a demand for 4 times as many waiter/waitresses as there are for cooks in the program area of Food Services.

Thank you for your input in this matter.

Sincerely,

Average Weighted Entry Level Wage Formula Worksheet C/B-8.2

Once the entry level wages for each job for which a particular occupation program trains have been identified and the relative weight, importance or demand these jobs have with each other has been determined, the following formula can be used to calculate the average weighted entry level wage for that occupational education program.

$$AWW = \frac{e_1r_1+e_2r_2+e_3r_3+\ \dots\ +e_nr_n}{r_1+r_2+r_3+\ \dots\ +r_n}$$

where AWW = average entry level wage for an occupational education program

e = the entry level wage for occupation that the program trains for

r = the relative weight of that occupation compared to the other occupations that the program trains for

Example: If the following data are received from the Department of Labor on each of the occupations listed for the program of Data Processing, then the calculations are as follows:

Program: Data Processing

Occupations	Entry Level Wage	Weighting
Keypunch Operators	$3.38/hr.	1200
Computer Programmers	5.15	900
Computer Systems Analysts	6.47	485
Computer Specialists, n.e.c.	3.68	100
System Engineer EDP	7.21	25

$$AWW = \frac{e_1r_1+e_2r_2+e_3r_3+e_4r_4+e_5r_5}{r_1+r_2+r_3+r_4+r_5}$$

$$AWW = \frac{(3.38\text{x}1200) + (5.15\text{x}900) + (6.47\text{x}485) + (3.68\text{x}100) + (7.21\text{x}25)}{1200+900+485+100+25}$$

$$AWW = \frac{4056 + 4635 + 3137.95 + 368 + 180.25}{2710}$$

$$AWW = \frac{12377.20}{2710} = \$4.57$$

112

Program Articulation

Rationale:

Articulation is an overworked term in educational circles today and yet totally articulated programming is scarce and articulation as a criterion through which programs are evaluated and improved receives little if any recognition. In occupational education program articulation can take several directions. The areas treated by this module involve the level of cooperation/coordination between secondary and post-secondary occupational programs and the working relationships with special education in dealing with occupational students with handicapping conditions. In these two major categories there are several vehicles or strategies through which articulation can be attained; defining roles, sharing expensive equipment, and determing curricular charges are but a few.

Few educators would argue against the need for improved articulation among educational providers. Tight financial circumstances at most institutions continually threaten to limit the quality and quantity of occupational offerings available to the community. Occupational educators should therefore strive to offer programs that avoid competitive duplication and foster cooperation, coordination and articulation. The possibilities are many but the track record is notoriously poor. If articulation among occupational education programs is to grow, it should be formally recognized as an important aspect or component of the program's effectiveness and be included as a criterion in a comprehensive evaluation scheme.

Since articulation is a relatively uncharted evaluation criterion for occupational education programming, the techniques necessary to measure its level of effectiveness can be developed by the evaluating institution. This packet will discuss several topics over which articulation can take place between two institutions. The user may then select the types of articulation desired and express them in their program objectives. In many cases, particularly as articulation efforts are initiated, the measurement procedures will simply be a statement of the completed activity. As the level of sophistication of program articulation improves, more discriminating measurement techniques will have to be developed.

Examples of program objectives that could address the criterion of program articulation include:

- The occupational education instructor will be involved in the development of the occupational programming section of the Individual Educational Program (IEP) for all handicapped students enrolled in his/her course.

- The occupational education instructor will meet monthly with the special education instructor of each handicapped student enrolled in his/her occupational education course to discuss progress, problems and future learning strategies.

- The secondary occupational instructor will meet at least twice with the post-secondary occupational instructor of a related program to define their respective roles, identify topics and levels of curricular involvement, and tour the other's facility.

- The occupational instructor (secondary or post-secondary) will meet with the instructors of related programs from at least two sending institutions. The purpose of these meetings will be to improve recruiting techniques and establish criteria for advanced standing.

SUBJECT: Program Articulation Evaluation

RESPONSIBILITY	ACTION
Program administrator and instructors.	1.0 Identify/develop the program objectives that relate to program articulation. 1.1 See program objectives packet. 1.2 Use Job Outlines A-1 and A-2 to identify topics for which articulation objectives can be developed. 2.0 Explicitly state how each objective identified in 1.0 will be measured. 2.1 Refer to Job Outlines A-1 and A-2 for suggestions. 3.0 Identify the types of data to be collected in order to realistically determine if the objectives have been achieved. 3.1 Review the objectives and measurement criteria. 3.2 Identify related data already being collected. 4.0 Select and implement data collection strategies and compile results. 5.0 Compare the results with the identified objectives. 5.1 Refer to objectives developed in 1.0. 6.0 Prepare and submit report on program articulation. 6.1 Success with program objectives. 6.2 Obstacles/roadblocks to achieving program objectives. 6.3 Recommendations for future program objectives. 6.4 Improvements in measurement strategies and instruments and data collection techniques.

Purpose:

As the rights of and expectations for handicapped individuals improve, the number of students with special needs in occupational education programs increases. Unfortunately, many occupational instructors are reluctant to deal with handicapped students for a variety of reasons. However, the problem will not go away and steps must be taken to improve communications and cooperation with people knowledgeable in the area of special education.

The purpose of this section is to help the user identify areas in which articulation between special education and occupational education can be promoted, as well as to give them a basis for measuring the success of such articulation efforts.

The two major providers of services to handicapped students are the special education programs in which students less than twenty-one years of age are eligible to be enrolled either through the component school district or the BOCES program, and the Office of Vocational Rehabilitation (OVR) which provides services to all other handicapped individuals. Either of these agencies may be the target for articulation with occupational programs at either the secondary or post-secondary level.

The worksheets presented in this section are summarized as follows:

A-1.1 Possible Topics for Special Education Articulation - This worksheet identifies several directions that Special Education/Occupational Education articulation may take.

A-1.2 Values Clarification - This worksheet presents a series of items that may help determine how individuals view students with special needs and the services available to them.

A-1.3 Occupational Education/Special Education Survey - This worksheet can be used to identify future direction for occupational education involvement with special education students.

The following are job outline instructions.

1.0 Review topics listed in A-1.1 for which articulation with special education can occur.
2.0 Assess the level of articulation that currently exists between your occupational education program and special education.
3.0 Identify the desired state of articulation for the upcoming year based on the information developed in 1.0 and 2.0.
4.0 Formalize the desired state of articulation in program objectives.
    4.1 See the program objectives packet for assistance.
5.0 Describe how the desired outcomes will be measured.
    5.1 See A-1.2 through A-1.3 for examples and suggestions.

Possible Topics for Special Education Articulation

Worksheet A-1.1

Introduction

Listed below are a series of topics over which occupational programs may desire to improve communication and cooperation with special education programs. It is suggested that the user review these topics and adopt/adapt those ideas as program objectives which they feel are both beneficial and realistic to their occupational program. This list is not thought to be prescriptive nor exhaustive, but rather a means through which a desired state of special education/occupational education articulation can be identified.

The topics include:

- Identify the attitudes towards special education students by teachers, administrators and other students (attitude assessment survey included in A-1.2).
- Develop strategies to alter negative attitudes towards handicapped students.
- Identify the level of awareness of the nature and needs of students with handicapping conditions.
    - Do occupational instructors clearly understand the terms and definitions related to special education?
    - Do occupational educators understand the characteristics and descriptions of students with varying handicapping conditions?
- Identify and clarify the values teachers, administrators and students have as they relate to handicapped students (values assessment survey included in A-1.3).
- Identify the readiness skills which are needed for handicapped students for particular occupational education courses.
- Identify the specific needs of prospective handicapped students in a particular occupational education course.
- Adapt instructional materials and methods to meet the special needs of handicapping students.
- Adapt the occupational curriculum to make it more flexible in order to meet the specific needs of special students (e.g. modularization).
- Adapt occupational equipment and program space to meet the specific needs of handicapped students (e.g. blind, deaf, wheelchair, etc.)
- Involvement in the occupational education section of the special student's Individualized Educational Plan (IEP) by the Occupational education instructor.

- Awareness by occupational teachers of the resources available to them to assist in instructing handicapped.
  - Special education instructors, Office of Vocational Rehabilitation, special counselors, parents.
  - Curriculum resources/materials.
  - Physical aids for students.

Values Clarification Worksheet A-1.2

Purpose:

This instrument can be administered to teachers, students or administrators to help clarify their thinking on students with special needs and the educational programs available to them. It may also be used as a springboard for discussion and concensus by having individuals complete the survey and then interact in small groups of four to eight to arrive at agreement for each item.

Instructions

On the scale accompanying each item, indicate the degree that you favor one of the two opposing statements by circling the appropriate number. The coding for the numbers is as follows: 1) strongly agree with statement A; 2) agree with statement A; 3) undecided, neutral or middle of the road; 4) agree with statement B; and, 5) strongly agree with statement B.

	Statement A	Statement B
1.	If a child is handicapped, he should be placed in a special class.	All handicapped children should be mainstreamed in order to facilitate the process of normalization.
	A 1/ 2/ 3/ 4/ 5 B	
2.	The parents of retarded children are better able to understand their child's problems than are professionals who only see their children part of the day.	The parents of retarded children are usually limited in their ability to understand their children.
	A 1/ 2/ 3/ 4/ 5 B	
3.	All teachers are able to help retarded children learn if they would just make an effort at individualizing instruction in their classes.	Special education teachers have unique training and skills that allow them to be successful in teaching retarded children.
	A 1/ 2/ 3/ 4/ 5 B	
4.	Regular classroom teachers should be provided with in-service courses designed for helping the handicapped before they receive a handicapped child in their program.	In-service education will not significantly change regular classroom teachers' approaches to the education of the handicapped.
	A 1/ 2/ 3/ 4/ 5 B	
5.	There are many fine private schools for handicapped children and parents should be allowed to have their child attend one of these programs at public expense.	The public schools should adopt a "zero" rejection philosophy and provide programming for all handicapped children.
	A 1/ 2/ 3/ 4/ 5 B	

	Statement A	Statement B
6.	There are many retarded children whom school districts have failed to identify and serve who are presently failing in regular classes; the Committee on the Handicapped must seek these children out.	Many retarded children are better off not being labeled and being maintained in regular classes for the duration of their school years.
	A 1/ 2/ 3/ 4/ 5 B	
7.	Due to new legislation, the handicapped are finally able to receive the educational services they deserve.	As a result of new laws which mandate spending substantial sums on the handicapped, many services may be taken away from "normal children."
	A 1/ 2/ 3/ 4/ 5 B	
8.	Special education classes are merely a "catch all" for placement of children that regular education administrators don't know what to do with.	Special education classes are provided for those students who would most benefit from a particular type of program.
	A 1/ 2/ 3/ 4/ 5 B	
9.	Non-handicapped children are receptive to retarded children placed in regular classes.	Education of retarded children must include curriculum within the regular class which will foster positive attitudes by non-handicapped children toward the handicapped.
	A 1/ 2/ 3/ 4/ 5 B	
10.	Services to aid the regular classroom teacher in the education of handicapped children are easily obtained.	Regular classroom teachers with handicapped children in their classes are left "on their own," once placement has been made.
	A 1/ 2/ 3/ 4/ 5 B	

Occupational Education/Special Education Survey* Worksheet A-1.3

The purpose of this survey is to help identify future directions for occupational awareness, exploration and skill development for special education students. Please respond as completely and candidly as possible. Your input will be most helpful in identifying areas of need and concern.

1. Vocational education for special education students should be provided in:

   ____ regular vocational education programs
   ____ special vocational classes for handicapped only
   ____ special schools or workshops
   ____ other: Please specify ______________________________

   Please explain the reasons for the above choice: ____________________
   ____

2. Vocational education for the handicapped should be the responsibility of:

   ____ occupational education personnel
   ____ special education personnel
   ____ a joint team of special and occupational education personnel
   ____ Other: Please specify ______________________________

3. List the occupational course offerings you feel are most appropriate for special education students:

   ____________________ ____________________
   ____________________ ____________________
   ____________________ ____________________
   ____________________ ____________________

4. List the occupational program offerings you feel are not now being offered by your institution that you feel would be important for vocational education of special education students. Note whether it should be a one or two year program.

Program	One Yr.	Two Yr.
____________________	____	____
____________________	____	____
____________________	____	____
____________________	____	____

5. At what age do you feel special education students should begin participation in:

Career Awareness activities	Age ____
Occupational Exploration programs	Age ____
Vocational Education programs	Age ____
Work-experience programs	Age ____

6. As a vocational education teacher do you feel you are adequately prepared to teach special education students in a vocational education program?
Yes _____ No _____

7. a. IF you checked NO in #6, what type of skills, techniques, understandings, information, etc. would you like to obtain?

____

____

____

____

____

b. I would like to obtain this information through (please check)

____ College courses
____ in-service courses
____ other
____ none of the above

8. As a vocational education teacher, would you be interested in teaching special education students in an occupational program?

_____ Yes _____ No

9. If a vocational education program for special education students is to succeed, what conditions do you feel are necessary?

____

____

____

____

____

____

THANK YOU!

*Adapted from Erie #2 BOCES

Purpose:

Articulation/cooperation between the secondary and post-secondary levels can lead to sharing ideas, techniques, curriculum, equipment and facilities. The net result of this interlevel interaction is increased opportunities and smoother transitions for students.

The purpose of this section is to help the user focus on specific topics over which secondary/post-secondary articulation can take place and to develop a process whereby these topics may be reviewed. Although this section deals with secondary/post-secondary relationships, it may also be applied to articulation activities between two-year and four-year post-secondary institutions or secondary area occupational programs (BOCES) and the industrial arts programs at their component school districts.

A-2.1 Considerations for Secondary/Post-Secondary Articulation - This worksheet identifies several topics that may be considered in the development of program objectives for secondary/post-secondary articulation.

The following are the instructions for this job outline:

1.0 Review the topics listed in A-1.1 for which articulation between secondary and post-secondary occupational institutions can occur.
2.0 Assess the level of secondary/post-secondary articulation that currently exists with your program and related programs at the other level (secondary or post-secondary).
3.0 Identify the desired state of articulation for the upcoming year based on the information developed in 1.0 and 2.0.
4.0 Formalize the desired state of articulation in program objectives.
    4.1 See the program objectives packet for assistance.
5.0 Describe how the desired outcomes will be measured.

Considerations for Secondary/Post-Secondary Articulation   Worksheet A-2.1

Instructions

The items below are intended to help a particular program investigate the level of understanding and cooperation it has with a similar program at another level (post-secondary vs. secondary). Therefore for post-secondary people Program XYZ will be thought of as a post-secondary program and the thrust of the questions will be directed at identifying situations at the secondary level. For secondary people the reverse will be true.

1. What post-secondary (or secondary) schools are in the area and what courses/programs do they offer that are related to Program XYZ?

2. What topics, units of instruction or competencies are taught locally at the post-secondary (secondary) level which relate to Program XYZ?

3. Do Program XYZ managers have copies of the curricula of related programs at the post-secondary (secondary) level?

4. What role should Program XYZ play in the delivery of occupational education with respect to similar programs at the post-secondary (secondary) level?

5. What are areas of uniqueness and overlap that the curriculum of Program XYZ has with respect to related curricula at the post-secondary (secondary) level?

6. What are the facilities like at the post-secondary (secondary) level for programs related to Program XYZ? Can they be shared?

7. What equipment and supplies are used at the post-secondary (secondary) level for programs related to Program XYZ? Can they be shared?

8. Have representatives (students, teachers, administrators, consultant committees) from Program XYZ visited related programs at the post-secondary (secondary) level? What was intent of visit? What was benefit of visit?

9. Is there representation on the Program XYZ consultant (craft or curriculum) committee from related programs at the post-secondary (secondary) level?

10. Is there a process in place that will allow students from Program XYZ to obtain advanced standing or a credit waiver in related programs at the post-secondary level? Are there competency or proficiency tests, formal administrative agreements regarding credit, and documentation procedures?

11. Are the prerequisite requirements of related post-secondary programs satisfied by Program XYZ?

12. Is the format of Program XYZ curriculum consistent with the format of related curricula at the post-secondary (secondary) level?

13. How does Program XYZ recruit students from related programs at the secondary level (teacher contracts, institutional recruiters, student presentations, visitations, etc.)?

Ancillary Services

Rationale:

An array of ancillary services (e.g. student organizations, work study, remedial programs, counseling, placement, etc.) are available to each occupational education program and in order to provide students with the best possible learning experiences, the programs must use these services both effectively and efficiently. To do this educational managers (teachers) and students must understand what services are offered, what the goals and specific objectives of those services are, how to determine when the services are needed and how to gain access to each service.

This section has not been designed to evaluate the various ancillary services, although feedback useful to that function will most likely be generated. Rather the major focus of this module is to evaluate how well occupational programs use ancillary services to promote their learning objectives and to provide a vehicle through which occupational programs can improve their use of ancillary services. As programs seek to improve their use of these services, suggestions directed toward the services will surface. It is through this secondary feedback that the services can be improved.

Teachers, students and consultant committees are groups that might be involved in the review of a program's use of ancillary services. As is the case with the other evaluation criteria, the program objectives will identify the benchmarks against which this review can take place. Since there is such a variety of ancillary services, this module will identify sample program objectives in the Job Outlines written for each of the specific services treated. In that way the user will be able to look over a broad assortment of specific suggestions that may be helpful in determining program objectives.

In implementing this model users are cautioned to engage those modules that are manageable for them. This may mean that in the first year of involvement only six of the nine modules will be selected. As the entire evaluation process takes hold, more in-depth use of the modules and the inclusion of additional modules should follow. This line of thought should also be considered when working with this module. There are several ancillary services addressed in this section, and perhaps the users should begin to review their programs with respect to only a couple of the services, leaving the remainder for such time when evaluation procedures are better established.

SUBJECT: Ancillary Services

RESPONSIBILITY	ACTION
Program administrators, instructors and ancillary services staff.	1.0 Identify the program objectives that relate to ancillary services. 1.1 If program objectives have not been developed or are incomplete, refer to the program objectives package. 1.2 Review Job Outlines AS-1 through AS-4 to determine specific areas over which objectives may be written. 2.0 Determine the types of information to be collected. 2.1 Review the objectives identified in 1.0 and list the types of data that will be necessary to make the analysis. Familiarity with Job Outlines AS-1 through AS-4 will be helpful. 3.0 Develop, adopt or adapt a survey instrument(s) that can be used to gather the data to measure the above identified objective(s). 3.1 For sample surveys, see Job Outlines AS-1 through AS-4. 4.0 Administer the survey instrument (collect the data). 5.0 Tabulate and aggregate the survey results. 5.1 The process for tabulating the survey results should be considered when the instrument is being developed. 6.0 Compare the results with the above identified program objectives. 6.1 Refer to the objectives identified in 1.0. 7.0 Prepare and submit a report. 7.1 Identify the success/failure rate with the identified objectives. Reasons for successes or failures should be included in this section. 7.2 Make recommendations for future objectives. 7.3 Make recommendations for improved data collection methodologies. 7.4 Make recommendations for improvement of the ancillary services.

Purpose:

This job outline deals with student professional organizations of which there are several available to those enrolled in occupational programs, e.g. Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Future Farmers of America (FFA), Future Homemakers of America (FHA), Vocational Industrial Clubs of America (VICA) as well as any similar clubs or organizations started by the school, a particular occupational education program, or individuals outside of the school. The purpose of this section is to determine/measure how effectively occupational programs use student professional organizations to enhance the learning environment for students.

If a decision is made to evaluate an occupational program with respect to its interaction/use of student organizations, then the review should be made in light of the program objectives that refer to student organizations. As indicated in the rationale for the Ancillary Services Module, the job outlines for each of the services identified by this packet will contain a set of sample program objectives for that ancillary service. In keeping with this, the following are suggestions for program objectives that relate to the review of an occupational program with respect to student professional organizations.

- That Program XYZ will have a 75% enrollment in VICA (or any other club(s)).
- That all Program XYZ students involved in student professional organizations will complete a long term project which is related to and an extension of their occupational program content or curriculum.
- That each student in Program XYZ involved in student professional organizations will enter at least one skill competition in his/her vocational area.
- That Program XYZ will be aware of and have input to the goals and objectives of all student professional organizations that its students belong to.
- That Program XYZ begin a student professional organization to provide its students with out-of-class experiences related to their vocational area of interest.
- That Program XYZ identify at least five specific strategies that detail how student professional organizations can be used by occupational programs to enhance student learning.

There are two worksheets presented in this section. They are summarized as follows.

AS-1.1	Student Professional Organization Review Sheet - This worksheet contains a series of questions that explore many of the variables that can be addressed as an occupational education program is reviewed with respect to student professional organizations.

AS-1.2 Student Professional Organization Data Sheet - This worksheet offers format and content for data to be gathered on an occupational education program that is reviewed with respect to student professional organizations.

The following is a set of procedures that can be used to review occupational education programs with respect to student professional organizations.

1.0 Identify program objectives that relate to student professional organizations.
    1.1 Review the sample program objectives identified above.
    1.2 Review the questions posed in AS-1.1.
2.0 Determine the types of information that need to be collected or developed to perform this review.
3.0 Determine the specific data collection methodologies and forms to be used.
    3.1 Review AS-1.1 through AS-1.2 for suggestions.
    3.2 Pilot agreed upon forms.

Student Professional Organization Review Sheet

Worksheet AS-1.1

Below is listed a series of questions that a program could consider in reviewing its performance with respect to student professional organizations. All of the items suggested will not apply to every institution. Users are encouraged to select those items or topics that are manageable and consistent with their goals and established systems.

1. How many students were members of student professional organizations?
2. What percentage of the class belonged to student professional organizations?
3. What are the eligibility/membership requirements for the student professional organization - are they prohibitive?
4. What does the student professional organization identify as its goals and specific objectives?
5. From the standpoint of an occupational program what specific service(s) should a student professional organization offer to enhance the occupational program? How can a student organization best supplement an occupational education program?
6. What activities were the students engaged in by the student professional organization?
7. Did members of the student professional organization participate in the organization throughout the year? What was the dropout rate?
8. For students that did not belong to a student professional organization, what was their reason(s) for not joining?
9. Did the student professional organization demand too much in-class time from the students? Could that time have been better used by the instructor for structured learning activities?
10. Were projects undertaken by the student professional organization extensions of classroom activities?
11. Did the occupational program have influence over the projects and goals of the student professional organization?
12. How did an occupational program utilize the student professional organization? What programs objectives were satisfied through student professional organization?
13. How should an occupational program better utilize the student professional organization?

Student Professional Organization Data Sheet Worksheet AS-1.2

Date ______________

Name of Occupational Education Program ______________________________

Title of Person Completing Form ______________________________

The following information is to be identified for each student professional organization to which students enrolled in a particular occupational education program belong.

1. Name of Student Professional Organization ______________________
2. Number of students in Program XYZ that belong to Student Professional Organization ABC ______________________
3. Percent of students in Program XYZ that belong to Student Professional Organization ABC ______________________
4. Dropout rate of students in Program XYZ from Student Professional Organization ABC ______________________
5. Eligibility requirements for students to belong to Student Professional Organization ABC ______________________
   ____
6. Stated goals of Student Professional Organization ABC ______________
   ____
   ____
   ____
7. Identify how Program XYZ used Student Professional Organization ABC to enhance its curriculum ______________________
   ____
   ____
   ____
   ____
   ____
8. Indicate how Program XYZ could better use Student Professional Organization ABC to enhance learning ______________________
   ____
   ____
   ____
   ____
   ____

Student Services

Job Outline AS-2

Purpose:

The term Student Services is used by this model to encompass all those activities that are generally provided by a guidance office. This includes counseling (vocational, personal or crisis), job placement, job seeking skills, and work study (cooperative, internship, shadow, work experience, capstone, Youth Employment and Training, Targeted Jobs Tax Credit, etc.). The purpose of this section is to determine/measure how effectively occupational programs use student services to enhance the learning environment for students.

If a decision is made to evaluate an occupational program with respect to its interaction/use of student services, then the review should be made in light of the program objectives that refer to student services. As indicated in the rationale for the Ancillary Services Module, the job outlines for each of the services identified by this packet will contain a set of sample program objectives for that ancillary service. In keeping with this, the following are suggestions for program objectives that relate to the review of an occupational program with respect to student services.

- That all students in Program XYZ are registered with placement services.
- That 90% of the students in Program XYZ follow through on at least two employment opportunities.
- That each student in Program XYZ will complete at least one mock interview, three different employment applications and his/her own resume.
- That 90% of the students in Program XYZ have completed a vocational self assessment and identified at least one career objective.
- That 60% of the students in Program XYZ will be involved in a work study program.
- That the evaluation of work study experiences of students in Program XYZ will be integrated into their total occupational education program evaluation.

The worksheet presented in this section is summarized as follows.

AS-2.1 Student Services Review Sheet - This worksheet contains a series of questions that explore many of the variables that can be addressed as an occupational education program is reviewed with respect to its effective use of student services.

The following is a set of procedures that can be used to review occupational education programs with respect to student services.

1.0 Identify program objectives that relate to student services.
  1.1 Review the sample program objectives identified above.
  1.2 Review the questions posed in AS-2.1.
2.0 Determine the types of information that need to be collected or developed to perform this review.
3.0 Determine the specific data collection methodologies and forms to be used.
  3.1 Review AS-2.1 for suggestions.
  3.2 Pilot agreed upon forms.

Student Services Review Sheet

The purpose of this worksheet is to identify for the users several topics over which they can review their program with respect to student services. There are four specific services addressed by this worksheet and because of their nature there is a certain amount of overlap. Users are encouraged to look over this worksheet and select those variables which are meaningful and manageable for their program review.

1.0 Placement and Follow-Up - Obtaining employment upon completion of the occupational program is an important objective for most occupational education institutions. It is therefore important that each specific program effectively utilize placement and follow-up services.

- 1.1 Are the students aware of the goals and objectives for the placement services available to them?
- 1.2 Do students understand the services available to them, the limitations and constraints of the placement office?
- 1.3 How many (or what percentage) of the students in a particular occupational education program took advantage of (registered with) the placement office?
- 1.4 Are there any obstacles or roadblocks that prevent students from using the placement services?
- 1.5 Are placement activities an integral part of both counseling and instruction?
- 1.6 Are placement records current and do they include job opportunities, job placements, eligibility requirements and employment contacts?
- 1.7 Is there an opportunity to provide input or suggestions for improvement to the placement office?
- 1.8 What type of follow-up data is needed and collected by a particular occupational education program?
- 1.9 How is follow-up data used to enhance the objectives of an occupational education program?

2.0 Job Seeking Skills - Job literacy, which deals with job seeking and maintenance skills, is a very important part of any occupational program. This section will focus on the services available to enhance job seeking skills available to students. Interviewing techniques, completing employment applications, researching occupations, identifying current employment opportunities, recognizing occupational trends and establishing employment contacts are samples of job seeking skills.

- 2.1 Can students identify the variety of skills necessary to seek employment?
- 2.2 Are students aware of the objectives that relate to job seeking skills and the importance of those skills?
- 2.3 Is current employment information (trends and specific job opportunities) available to students and do they know how and where to find this information?
- 2.4 How many students in a particular occupational education program were involved in at least one mock interview?
- 2.5 How many students filled out at least three different employment forms?
- 2.6 Do students develop their own resume?
- 2.7 Are the job literacy skills of students formally evaluated and are students informed of their level of competence in this area?

2.8 Is there a mechanism to allow for input directed toward the improvement of activities related to teaching/reinforcing job seeking skills?

3.0 Counseling - There are basically three types of counseling services available to occupational students: 1) Vocational/career counseling 2) Personal counseling 3) Crisis counseling.

3.1 Are students aware of the counseling services available to them?
3.2 Are students aware of the goals and objectives of the counseling office?
3.3 Does each student have a definite career objective?
3.4 Is there an adequate referral process?
3.5 Do students understand how they can gain access to the counseling system?
3.6 Are students aware of opportunities available to them regarding further occupational preparation?
3.7 Are students aware of the scholarships, grants and loans available to them?
3.8 Are students motivated to seek employment?
3.9 How many students have completed a comprehensive vocational self assessment?
3.10 For those students that have the need, are they aware of opportunities for part time related employment?

4.0 Work Study Services - There are a variety of work study programs available to students. Some are unpaid such as internships and shadow programs; some are paid such as cooperative and work experience programs; and some are paid and subsidized by the government such as Youth Employment and Training and Targeted Jobs Tax Credit.

4.1 Are students aware of the variety of work study opportunities available to them and do they understand the guidelines of each?
4.2 How many and what percent of the students in a particular occupational program are enrolled in work study programs?
4.3 Are students oriented/prepared to be involved in work study programs (job expectations, employer expectations and procedural logistics)?
4.4 Are students monitored in their work study situation?
4.5 Are the work study experiences of students evaluated (by a coordinator and employer) and is feedback provided to the students?
4.6 Are students aware of the goals and objectives of various work study programs?
4.7 Are work study activities tied into the occupational education program curriculum?
4.8 Are the dropout, absentee and tardiness rates for students involved in work study experiences below an earlier agreed upon standard?
4.9 Are follow-up sessions initiated for students who complete work study programs?

Purpose:

This job outline deals with an occupational education program's use of remedial/supplemental programs and related resource literature. Other learning resources such as audiovisual aides, textbooks, programmed materials, etc. are treated in the Facilities, Equipment and Supplies module in Worksheet FES-1.4. Users are also encouraged to note the overlap between remedial/supplemental programs and the articulation with special educators. The primary purpose of this section is to review how effectively occupational education programs use the learning resources available to them to enhance the learning climate for their students.

If a decision is made to evaluate an occupational program with respect to its interaction/use of learning resources, then the review should be made in light of the program objectives that refer to learning resources. As indicated in the rationale for the Ancillary Services module, the job outlines for each of the services identified by this packet will contain a set of sample program objectives for that ancillary service. In keeping with this, the following are suggestions for program objectives that relate to the review of an occupational program with respect to learning resources.

- That the reading and math remedial needs of each student in Program XYZ be assessed.
- That each student in Program XYZ diagnosed as needing remediation in reading or math will be enrolled in a formal remedial program.
- That at least 80% of the remedial activities/exercises for students from Program XYZ will be directly related to the occupational needs of that program.
- That each student in Program XYZ read at least one occupationally related trade journal, book or magazine each semester.
- That 95% of the students from Program XYZ who are involved in a remedial program indicate that they were satisfied with the remedial program.

The worksheets presented in this section include:

AS-3.1	Learning Resources Considerations - This worksheet contains a series of questions that explore many of the variables that can be addressed as an occupational education program is reviewed with respect to remedial programs and related resource literature.
AS-3.2	Remedial Program Worksheet - This worksheet presents a structure for obtaining data that relate to how effectively an occupational education program used remedial programs.

The following is a set of procedures that can be used to review occupational education programs with respect to learning resources.

1.0 Identify program objectives that relate to learning resources.
    1.1 Review the sample program objectives identified above.
    1.2 Review the questions posed in AS-3.1.
2.0 Determine the types of information that need to be collected or developed to perform this review.
3.0 Determine the specific data collection methodologies and forms to be used.
    3.1 Review AS-3.1 through AS-3.2 for suggestions.
    3.2 Pilot agreed upon forms.

Learning Resources Considerations

Worksheet AS-3.1

Below is listed a series of questions that a program could consider in reviewing its performance with respect to learning resources. As noted in the introduction to this job outline teaching aides, audiovisual, textbooks and the like are treated by Worksheet FES-1.4. This worksheet focuses on remedial/supplemental programs and library resources. Users are encouraged to read through this section and select those items or topics that are manageable and consistent with their goals and established systems.

1. What types of remedial/supplemental programs (e.g. reading, math) are available to students in a particular occupational education program?

2. What are the goals, objectives and specific philosophies of each remedial/supplemental program?

3. Are students aware that remedial/supplemental programs exist for them and do they understand their importance and how they can gain access to such programs?

4. Are all students assessed to determine if they need remedial/supplemental help?

5. Is there a system through which students may be referred for remedial/supplemental help?

6. Do students identified as needing remedial/supplemental help receive it?

7. How many students in a particular occupational education program were diagnosed as needing remedial/supplemental help? How many received such help?

8. Does the remedial/supplemental program relate its instruction to the occupational needs of the student (e.g. is math related to the math needed by the student's occupational program, or is reading in the texts, handbooks or manuals of the student's occupational education program)?

9. How is the progress of a student's remedial/supplemental efforts evaluated and charted?

10. How are remedial/supplemental programs articulated with the occupational education programs?

11. Are trade magazines and occupationally related books and articles available to students in a particular occupational education program? Are students aware of this resource literature and do they know how to gain access to it?

12. Are students in a particular occupational education program encouraged to use resource books and magazines? Is it part of the curriculum?

13. Have students expressed a need for more related literature?

14. How many occupationally related books, magazines, etc. are available to students in a particular occupational education program?

15. How many students used (checked out) materials from the resource library?

16. How is a student's use of the resource library encouraged and/or reviewed by a particular occupational education program?

Remedial Program Worksheet Worksheet AS-3.2

This worksheet has been developed to offer a structure that is helpful in determining how effectively a particular occupational education program used the remedial services available to its students.

Date ______________

1. Occupational Education Program ______________________________
2. Individual Completing Form ______________________________
3. Remedial program available to students ______________________________
4. Process used to assess the remedial needs of students ______________
____
____
5. Number of students by subject area (reading, math, writing) in Program XYZ identified as needing remediation in Math ________
Reading ________
Writing ________
Other ________
6. Number of students in Program XYZ that received remediation in Math ______
Reading ______
Writing ______
Other ______
7. Method(s) by which the improvement of students enrolled in a remedial program was measured. ______________________________
____
____
____
8. From Program XYZ's point of view the strengths/benefits of remedial program ABC were ______________________________
____
____
____
9. From Program XYZ's point of view the weakness/problems with remedial program ABC were ______________________________
____
____
____

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